

POST-WAR BANKING POLICY

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POST-WAR BANKING POLICY

A SERIES OF ADDRESSES

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PREFACE



IN publishing the addresses delivered by me at the Annual Meetings of the Midland Bank since 1920 I have omitted the address delivered in January 1923, as its main subject is highly technical and of only temporary interest. In its place I have inserted an address to the American Bankers Convention in New York in the autumn of 1922 on Reparations and International Debts. With regard to such debts the experience of the last three years has shown us how readily the means of making external payments can be provided by incurring other, chiefly private, foreign debts; but the total of foreign indebtedness is not thereby diminished, and the normal difficulties attending external payment in money are only postponed.

I have thought it best to publish the addresses without alteration or amendment of the text except the omission of some introductory sentences and of matter relating purely to the affairs of the Bank.

R. MCKENNA.

October, 1928.

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BANK DEPOSITS, PRICES AND CURRENCY

January 29, 1920

I AM going to ask you to consider with me to-day a problem which has been much discussed in the Press and in Parliament. Nothing gives so much concern to the public at the present time as the great rise in prices. Masses of people find almost insuperable difficulty in bringing their expenditure within the limits of their income and they clamour for a remedy. So far as I have seen, the most popular proposal for reducing prices is to fix a limit to the currency note issue. It is supposed that if the currency were strictly limited in amount and at the same time had a proper proportion of gold backing, prices would not only cease to rise but would begin a downward movement towards their former level. In this view the increase in currency is regarded as the cause of high prices. But is this really the case? May it not be that the great increase in currency notes is itself only an effect of another cause, a mere link in the chain which ends in high prices? What is the relation between the increase of currency and high prices? What has caused the increase of currency? What has caused high prices? This is the problem I am going to ask you to consider to-day.

MONEY AND PRICES

In examining this question I should like to guard myself at once from misunderstanding. It is an accepted doctrine that there are three factors governing the price of commodities—demand, supply and cost of production. Although to-day I propose

to deal with only one of these factors—demand—I do not mean to imply that the others have not their due weight. The supply of commodities is less to-day than it was in 1914, and in consequence if the other factors had remained constant, some rise in prices would inevitably have occurred from this cause alone. Again, chiefly owing to higher wages, cost of production has risen greatly, but in the sequence of events it has generally followed, not preceded, the higher prices. Whatever share, however, these two factors may have had in raising prices there can be no question of the importance of the third. Demand, measured by the purchasing power of the public, has increased enormously. It does not of course necessarily follow that a man spends more because he has more money in his pocket or a larger bank balance than usual; yet if we take the community as a whole we may be quite sure that as spending power grows, the demand for goods grows with it, and as demand grows, prices rise. Here, then, is the first step we must take to solve our problem; we must find the cause of this increase of spending power.

Before proceeding further it will be well to recall the estimated figures of currency, bank deposits, and prices of commodities, as they stand to-day compared with 1914.

First of all I will take the figures of currency. It is estimated that in 1914 the total amount of currency in circulation, *i.e.*, gold, silver, copper coin, and bank notes, was £128,000,000. This figure represents the total amount of currency held by the public, but does not include currency held by the banks. To-day the corresponding figure is estimated at £393,000,000, an increase of £265,000,000, or 207 per cent.

As I am giving these figures I may as well state here that the estimated amount of currency held by the banks in 1914 was £75,000,000, and in 1919 £191,000,000, an increase of £116,000,000, or 154 per cent.

Next I will give figures of bank deposits, but in doing so I should explain that they do not include Bank of England deposits. Before the war, the total deposits of the banks of the United Kingdom, including under the name deposits—and this is important to note—money held on current account as well as on deposit account, amounted to £1,070,000,000. The corresponding figure last month was about £2,300,000,000, an increase of £1,230,000,000, or 115 per cent.

The actual spending power of the public is gauged by the total amount of currency in circulation added to the total amount of bank deposits. In 1914 the public spending power was £1,198,000,000; to-day it is £2,693,000,000, an increase of £1,495,000,000, or 125 per cent.

I turn now to a comparison of the prices of commodities of everyday use or consumption before the war and at the present time. The figures are based upon the return issued by the Ministry of Labour, and are expressed in the form of percentage increases over the corresponding prices of 1914. If we take 100 to represent the cost of living in 1914, the corresponding figure to-day would be about 225, or an increase of 125 per cent. In estimating the cost of living we have included all ordinary expenses and we have taken the commodities forming part of our everyday consumption in such quantities as we consumed in 1914. Thus we see a marked increase in currency, in bank deposits and in the price of commodities. The spending power of the public

and the cost of living show the same percentage increase of 125.

GROWTH OF BANK DEPOSITS

We can proceed now to examine the immediate question before us, what is the cause of the increase in spending power, or in other words, of the increase in currency and bank deposits? I will ask you to consider the growth of bank deposits first. Bank deposits are derived from two sources and from two sources only. The first and most obvious source is by payments of currency into a bank. Anyone who takes notes out of his note-case and pays them into his bank creates a deposit. The second source from which deposits are derived cannot be described with equal simplicity. Stated in comprehensive terms which I will explain directly, deposits arise from payments by a bank which are neither charged against an existing deposit nor used for the repayment of an existing debt to a bank. I am speaking now of bank deposits in the aggregate, with which alone we are dealing, and not of deposits in any individual bank. Payments by a bank which are not charged against an existing deposit consist chiefly of bank loans or advances. But they include also all bank investments and all purchases and payments made by the bank for itself and charged against its own resources. It will simplify the discussion if we treat bank investments, as we are entitled to do, as loans of a more permanent nature than the ordinary loan or advance. Similarly the purchase or discounting of bills may also be regarded as a bank loan.

The aggregate then of bank deposits is increased by payments into banks of currency, by bank loans

and by payments by banks on their own account to meet their own expenses, as for salaries or to buy new premises. In making a comparison between bank deposits at two different dates, we may reasonably leave this last source of increase out of account. Just as payments on a bank's own account augment deposits, so receipts on a bank's own account diminish them. Payments and receipts have both grown considerably since 1914, but they have both grown at the same pace, and comparing one year with another, we may fairly set off the total of the payments against the total of receipts.

We have now reached the point at which we may say that payments into banks of currency and bank loans, giving to the word loan the widest meaning, are the only sources of increase of the aggregate of bank deposits which we need consider. At the risk of wearying you with a discussion of a process with which you are probably already thoroughly familiar, let me give a brief illustration of how bank deposits are increased by bank loans. When a bank makes a loan to a customer or allows him an overdraft, in the ordinary course the loan will be drawn upon, or the overdraft will be made, by a cheque upon the bank drawn by the customer and paid in to someone's credit at the same or another bank. The drawer of the cheque will not have reduced any deposit already in existence because we are supposing a case in which he has been given a loan or allowed an overdraft. The receiver of the cheque, however, when he pays it into his own account, will be credited with its value and thereby a new deposit will be created. The only case when a bank loan does not lead to a new deposit is when the cheque drawn against the loan is used by the receiver to pay off a loan which he had himself at his own

bank. In the same way, when a bank buys or discounts a bill, the proceeds of the sale are paid into the credit of the seller's account and increase the total of bank deposits; and in the same way also, when a bank buys War Loan or makes any other investment, the purchase money goes to the credit of somebody's account in some bank and increases the total of deposits.

Let us look now at the increase of bank deposits since 1914 and see to what extent this increase is due respectively to payments in of additional currency and to bank loans. In June, 1914, the banks held £75,000,000 of currency. Last month this figure stood at £191,000,000. The banks, therefore, held more currency to the amount of £116,000,000, and to this extent the increase in the aggregate of bank deposits is accounted for by payments in of currency. But it is estimated that, since June, 1914, bank deposits have risen by £1,230,000,000. If £116,000,000 of this amount are accounted for by payments of currency into the banks, there remain £1,114,000,000* which, if the previous analysis be accepted as correct, we must attribute to bank loans.

Let me guard myself, however, by saying that I do not give these figures as absolutely exact as the total figures of deposits given by the banks include not only customers' deposits but what the banks term "other accounts." But the error due to this omission in making a comparison between any two years is small, and I think we may accept as sufficiently accurate the estimate that in round figures

* A part of this total equal to the increase in the balances of the banks at the Bank of England has been created not by borrowings from the banks but by borrowing from the Bank of England.

bank deposits have increased by £1,100,000,000 since 1914 in consequence of bank loans.

IMPETUS TO RISING PRICES

Now that we have cleared so much ground, we must not forget the real object of our search. We are seeking the relation between the increase of bank deposits, the increase of currency, and high prices; and we have got so far as to see that bank loans are the main source of the growth of bank deposits. As an increase of deposits means an addition to our purchasing power, we should expect such an increase to be followed by a rise in prices. But we must guard ourselves here from a generalisation which may be too broad. If money is borrowed by manufacturers and traders for the purpose of the production or movement of commodities, the increase of purchasing power consequent upon the loans is followed in due course by an increase in the amount of commodities available, and the rise in prices which might be expected from a greater demand is corrected by a greater supply. Let us for a moment examine what takes place when a bank makes loans or advances in the ordinary way of trade. Suppose the case of a loan or advance to a manufacturer who uses the money to pay for raw material or wages, or some other expenses in the course of his business. When the goods are manufactured and sold to the merchant, it is expected that the proceeds of the sale will be used to pay off the bank loan. The merchant in his turn may have borrowed from his bank to pay the manufacturer, and there may be a whole series of loans from banks, each paid off in its turn as the goods pass from their primitive state of raw material to their

final destination as finished goods in the hands of the consumer. But when the consumer has paid cash for the goods, all the series of loans will in the ordinary course be liquidated and there will have been an increase in bank deposits only so long as the goods were not finally disposed of. In this view of bank transactions, loans by banks, and therefore deposits, would only increase in total amount as the total of commodities increased. There would be a greater purchasing power for the time being, but there would also be a greater supply in process of production.

It will be observed that the first effect of a trade loan is to increase deposits, and as the aggregate of such loans, and consequently of deposits and purchasing power, may be steadily growing in amount, it may be argued that loans of this kind may also drive up prices. To a limited extent this is true. In periods of active trade we know that bank loans increase and prices rise. But the rise in prices attributable to this cause can never go very far. Traders sometimes assume that banks have an unlimited power of making advances. They forget that every advance made by a bank comes out of the bank's cash resources. It is true the advances return to the banks in the form of fresh deposits and thus restore the bank's cash resources to their former level, but the result is to leave them finally with additional liabilities to their depositors without any addition to their bank cash. Happily in this country banks are careful to keep a proper proportion between their cash resources and their liabilities, though the misguided practice known as "window dressing," which is sometimes indulged in at the end of the year, might of itself throw a shade of doubt on what is in truth the very real

virtue of our banks. The moment this proportion reaches a point below which the management think it should not go, if the strength and credit of the bank are to remain unimpaired, the bank will decline to extend its total of credits. We shall see later how the cash resources of the banks can be increased, but without such an increase any great expansion of trade advances cannot occur. It may be said that bank loans to traders influence prices to no greater extent than the ordinary market fluctuations.

Even when a bank loan is made for the purpose of acquiring plant, the same is true in the long run as in the case just described. The loan would be outstanding for a greater length of time and deposits would be increased until the profit made out of the use of the plant was sufficient to pay off the loan; but in due course, owing to the additional output from the new plant, commodities would be increased in quantity and there would be no permanent rise in prices. On the other hand loans by banks which lead to no increase of commodities tend to raise prices; but banks do not look upon these loans with favour and, while they should be ready to assist the country's trade and production by such advances as their customers' capital and growth of business warrant, they should be and are careful to limit the amount of their advances for the purpose of capital outlay, and still more for mere accommodation.

Let me now sum up the case so far as we have gone. We have seen that during the last six years bank deposits have increased by £1,230,000,000. Of this amount we find that payments of additional currency into the banks accounts for £116,000,000. We have seen that any other cause

of an increase in deposits except bank loans is not large, and we have concluded that bank loans have been responsible for an increase of £ 1,100,000,000 in bank deposits. We have seen further that if these loans have been made to manufacturers and traders in the ordinary course of their business the increase in deposits, and consequently in purchasing power, would not of itself have caused a permanent rise in prices as the additional deposits would have been followed by an additional supply of commodities. To whom then have these loans been made? It is impossible to give precise figures, but the best estimate I can form is that of the total of £ 1,100,000,000, £ 800,000,000, including Treasury Bills, have been lent to the State, and £ 300,000,000 to trade. The Government, under the overwhelming necessity of war effort, has been the great borrower from the banks. The loans to the State have led to an immense increase of deposits, and as they have remained outstanding long after the commodities they were raised to pay for have been consumed, they have been an inevitable cause of a rise in prices.

GOVERNMENT BORROWINGS

In order to get a full understanding of the case, it is necessary now to examine the different effect upon prices of the different kinds of borrowing by the Government. The Government may borrow from three sources. They may borrow from the public, they may borrow from the banks, or they may borrow—and I put this in a category by itself—they may borrow from the Bank of England. If everything contributed to a national loan by the public were saved by them from their ordinary ex-

penditure, there would be no increase in prices. The additional expenditure of the Government would be counterbalanced by the reduced expenditure of the community. But when the public subscribe to Government loans out of their own resources, they always subscribe more than they save by curtailing their normal consumption. They subscribe in addition what they would ordinarily save and invest in any case, and their investment would in one way or another usually take the form of capital employed in the production of commodities. The money which would be so invested is spent by the Government and consequently to that extent increases the demand for goods without any increase of supply either actual or prospective, except in so far as the Government may themselves have spent the money on the erection of plant useful for peace production. With this partial limitation direct loans by the public to the Government through subscription to War Loans have no effect upon prices. They do not add to the total of bank deposits. The public must first draw upon their deposits with the banks in order to subscribe to the Loans, and when the Government spend the proceeds of the Loans, the money only fills up the gap in the deposits caused by the previous withdrawals.

But quite different effects follow when the Government borrow directly from the banks or indirectly from the banks through members of the public who obtain bank advances to enable them to take up the Loans. In each case the banks subscribe by drawing on their balances with the Bank of England. The money received by the Government is paid out in due course to meet liabilities to contractors, by whom again it is paid to the credit of their accounts with the banks. The customers'

deposits are thus increased, and as the banks in their turn pay the money in to their accounts at the Bank of England, the previous withdrawals from that Bank are made good. Thus the net effect of the whole proceeding is to increase the total amount of bank deposits by the exact amount which the banks have lent to the Government directly or indirectly, and the whole weight of the additional spending power is thrown upon prices.

The third case of Government borrowing which we have to consider is that of borrowing direct from the Bank of England. In that case a credit is given by the Bank of England to the Government, who draw upon it and payout the amount to contractors. In due course the contractors pay the money they have received into their accounts with their own banks, and deposits are thereby increased. The banks now hold more money, which in their turn they pay into their accounts at the Bank of England, and so increase their cash balance. There was no previous withdrawal in this case from bank balances at the Bank of England and there is consequently an increase in these balances exactly equal to the amount of the Bank of England's loan to the Government. Here we see both an increase in customers' deposits and an increase in the balances of the banks at the Bank of England. These balances are the basis upon which the banks found their advances, and an increase in them will necessarily be followed by additional advances whether to their customers or to the Government with a consequent further increase in deposits. We conclude from this analysis therefore that loans by the Bank of England to the Government have a much greater effect in raising prices than any other form of Government loan, as they not only immediately raise the

total of bank deposits, and consequently of spending power by the public, but they also increase the power of the banks to make further advances which in due course lead to still more deposits and still greater purchasing power.

BRITISH EXPERIENCE, 1914-1920

Now that we have examined the different methods of Government borrowing and have considered the effect of each in increasing bank deposits, it remains for us to look at the course of events as they have actually occurred since 1914 in forcing a rise in prices. At the outbreak of War, throughout its course, and right down to the present moment, the Government have been large buyers of commodities, greatly in excess of their normal demands. The first consequence of the immense Government purchases was to stimulate production. Machinery was used to its full capacity; the number of people employed was greatly increased; women took the place of men, and there was a very considerable addition to the total national output. But enlarge the output as we would, it could not keep pace with the nation's requirements. Demand outstripped supply, and, just as it happens when a period of comparative trade depression is succeeded by a trade boom, there was a natural rise in prices. At once more currency was needed, partly to pay the wages of the larger number of workpeople employed, partly because with higher prices shopkeepers keep more money in their tills. To the extent that more currency was issued the spending power of the community was increased. But up to this point the increase was not great. A new condition had to be introduced before any considerable rise could take place. There must be

not merely an increase in currency, the total of which in any case only represents a small part of the public spending power; but, far more important, there must be a serious addition to bank deposits. It was not long before this new condition arose. To meet the daily growing expenditure the Government had to borrow freely from the public, from the banks, and from the Bank of England. It is unnecessary to recapitulate the effects of this borrowing. Bank deposits increased enormously. There was no proportionate increase in the supply of goods and the usual consequences followed. Prices began to rise rapidly. The rise in prices was next followed by general demands for increased wages. As these now rose the cost of production rose too, and another turn was given to the screw on which prices were steadily mounting. But higher wages and higher prices mean a greater demand for currency. The weekly wages have got to be paid in legal tender money. In the course of the week the bulk of the money paid out in wages comes back through the shops to the banks, and is paid out by them again to meet the next week's requirements. But, as prices and wages rise, not all of it comes back, and each week a larger amount is retained in the pockets of the people, in the tills of shopkeepers, and in the tills and reserves of the banks.

We may stop here to ask, is there any stage in this process at which it would have been proper to limit the issue of currency? The main demand for currency is to meet the weekly wages bill. If wages increase, whether because more workpeople are employed, or because rates are higher, additional currency must be brought each week into circulation. If the supply were cut off, a substitute would have to be found.

At the outbreak of war there was not enough legal tender money to satisfy your additional requirements and at once postal orders and even postage stamps were used to make good the deficiency. If men and women are to be employed and paid, means of paying them must be found, and an arbitrary limitation of currency would merely inflict intolerable inconvenience upon the public.

Although, as I venture to think, the increase in currency is not the cause of high prices, yet I believe the public have shown a right instinct in fastening upon this increase as a matter for anxiety and even alarm. Though not the rain-storm itself, it is the gauge which measures the rainfall. The figures are easily apprehended, and the weekly records can be readily followed. Those who study them with care see that every advance by the Bank of England to the Government is followed by a fresh issue of currency notes. Once the nation can free itself from the need for these advances, the rise in prices, so far as it is due to an increased demand, will cease, and the currency in circulation will no longer expand. When the advances are paid off prices will tend to go down, and the currency in circulation will diminish.

When we look to the future we naturally ask, shall we ever get back to pre-war prices and pre-war currency and bank deposits? If I might hazard an opinion, it would be that prices will remain permanently on a far higher level than in 1914. The rise that has taken place is not local. It is not even European and American. It covers the whole world. The cost of living in Japan has risen quite as much as in this country. In India and China, where human wants are much less than with us and where custom plays a far stronger part in fixing prices, even there the cost of living is much above the pre-

war standard. Increased production will bring down prices to a certain extent, but the purchasing power of the world measured in money cannot be materially diminished. Deflation is bound to be very slow. Any attempt, indeed, to bring it about rapidly would cause widespread ruin among manufacturers and traders. The greatest caution will be necessary in handling our financial machinery and many of our pre-war ideas must be modified in view of the fundamental change in our conditions.

THE BANK RATE

In illustration of what I mean, let us take the Bank Rate and consider its operation to-day as compared with pre-war times. In the conditions we then enjoyed raising the Bank Rate was an admirable means of checking excessive borrowing, restoring our exchange, and restricting the demand for currency. To-day we cannot be certain that it will achieve any of these purposes. It is conceivable indeed that it may have the opposite effect. The Government has been a heavy borrower, and still may be, whatever the Bank Rate. Raising the rate depreciates all existing Government securities, which makes it difficult to borrow from the public. As a result the Government is driven to the Bank of England. We know the consequences: the total of deposits and Bank cash is increased, prices go up and the currency is further inflated. The purpose of raising the Bank Rate is to prevent borrowing by making it too expensive, and by this means to restrict deposits and the issue of currency; but when the borrower is a Government which may have to borrow, no matter what the price, and which has the power to compel the Bank of England to lend, raising the rate not merely fails to achieve its intended

purpose but actually operates in the opposite way. Until the Government have ceased to borrow, the Bank Rate cannot have its normal effect. It must be observed moreover that these considerations apply with equal force when the borrowing by the Government from the Bank of England is not to raise new money, but to pay off maturing debt held by the public or the banks and not renewed by them.

Again with regard to the exchanges, before the war, raising the Bank Rate was bound to send up the value of the pound sterling in foreign exchange. The balance of trade, including invisible exports and imports, was in our favour, and if for the moment the pound sterling had depreciated, it was only because we had lent too much money abroad. Raising the Bank Rate made it unprofitable for the foreigner to borrow in this market, and left our excess of exports free to assert its natural effect. To-day, the balance of trade is against us, and while the Bank Rate should be at such a level as not to encourage the discounting of foreign trade bills in our market, to raise it above this point may in existing circumstances injure, rather than benefit our exchange. For dear money adds to the cost of production and every addition to cost hampers our export to those foreign markets in which we have to meet serious competition. But it is precisely these markets in which sales are for prompt payment. We can no doubt sell all the goods we wish in countries in which sale is possible only on terms of very extended credit, but exports to such countries do no good to our exchange. Raising the cost of production at home in any degree has a tendency to drive our exports out of the cash markets into the credit markets and to that extent our exchange is injured.

I cannot help thinking that the advocates of dear money are premature in their policy. They do not take sufficiently into account the actual circumstances of the moment. They wish to stop the continual rise in prices with its concomitant social dangers, and rightly recognising that the high prices are in a large measure due to the immense increase in purchasing power consequent upon the growth of bank credit, they hope to restrict further bank advances by raising the Bank Rate. But they overlook the fact that much the greater part of the inflated credit is due to borrowing by the Government. Bank advances to industry, though heavy in the aggregate, are not greater than industry requires, having regard to the amount of money sunk in the high-priced stock which a trader has to carry. Dear money is an additional expense in production and has the effect in itself of raising prices, but the counterbalancing influence which it might be expected to exercise by the restriction of credit is neutralised by the repeated outpourings of bank cash due to borrowing by the Government from the Bank of England.

NEED FOR GOVERNMENT ECONOMY

The only condition on which we shall be able to check the rise in prices is that our annual expenditure is brought within the compass of our revenue. In State as in domestic finance we must learn to make both ends meet, and the case is not in the least bettered if we only balance our accounts by selling out capital stock and placing the proceeds to the credit of our revenue account. The expenditure of the Government is tantamount to the consumption of the quantity of commodities which the

money would buy, and this must not exceed the amount of commodities the consumption of which the community are compelled to deny themselves by reason of the taxes they have to pay. If it does, we run the risk, as is indeed now the fact, that our consumption may exceed our production. This is not a plea for additional taxation. Far from it. Our existing taxation, which is, I believe, higher than in any other country in the world, is already dangerously near the point at which thrift, business enterprise, and needful capital development become seriously impaired. But it is a plea for economy in expenditure. It is a plea for such ruthless cutting down or postponement of all financial outlay by the State as will reduce our expenditure to a figure less than our tax revenue, for by this method alone can we hope to restrict the issue of currency, check the rise in prices, restore our foreign exchange, and re-establish London in her old position as the financial centre and free gold market of the world.

MONETARY DEFLATION

TREASURY POLICY IMPRACTICABLE

January 28, 1921

TO-DAY I should like, with your permission, to make some observations on general financial conditions, with special regard to the influence of financial policy on the industrial and commercial interests of the country. In the intricate and highly developed organisation of our trade, the production, movement and disposal of commodities are largely financed with borrowed money. Banks, which receive deposits at interest and lend to the trade, and traders, who at one time hold money with the banks and at another borrow from them, have a like concern in the conditions governing the facility with which credit can be obtained and the rate of interest charged on loans. From time to time complaint has been made that credit has been unduly restricted and that dear money rates have contributed materially to the trade depression from which the country is suffering. We cannot form an opinion whether this criticism is justified unless we have a clear understanding of our present monetary conditions and of the causes which have given rise to them, and I propose in the first place briefly to examine these conditions.

WHEN THE BANK RATE IS EFFECTIVE

Before the War the money market was controlled by the Bank of England, and the Bank Rate was the instrument by means of which this control was

exercised. The ordinary banks could create credit, but they endangered their stability if they exceeded a limit ultimately determined by the amount of their cash reserves. These reserves in the aggregate could only be increased in one of two ways: either by means of loans made by the Bank of England or by the purchase of gold by any bank. If the Bank of England was asked to lend more than its own reserves would justify, the Bank Rate was raised and the demand for additional credit was countered by the rise in the rate of interest charged.

At that time, when our currency was based on a real gold standard, a rise in the Bank Rate had the effect not only of restricting credit and reducing the currency in circulation but also of attracting gold from abroad. This latter effect was not less important than the former. A demand for additional credit accompanied rising prices, and rising prices called for more currency to be put in circulation, which caused a reduction in the Bank of England reserve. As the Bank of England can issue additional notes only against gold, the same circumstances which rendered it advisable to restrict credit also made it necessary to increase the Bank's stock of gold.

In ordinary times the simplicity and effectiveness with which our central banking system worked were very remarkable. One important result achieved was that prices were kept at a fairly constant level. There were fluctuations indeed according to temporary trade conditions, and over long periods there were slow movements up or down according to variations in the efficiency of production or to the rise or fall in the output of the world's gold mines. But a rise in prices caused by undue expansion of credit was always checked before it had gone far and

before adjustments had been made to the new price levels on such a scale as to render a subsequent fall in prices destructive to trade. I shall explain more clearly what I mean on this point later in speaking of inflation and deflation.

WHEN THE BANK RATE IS NOT EFFECTIVE

It will be observed that the smooth and beneficial working of our central banking system implies the existence of two conditions. In the first place the Bank of England must have control of its own lending powers. It has this control in dealing with the Money Market ; but if, as is the case, the Bank is bound to lend when called upon by the Government, and if this right to borrow is habitually exercised, a rise in the Bank Rate will not necessarily check the expansion of credit. Next, the conditions must be such as to permit of a free market in gold. If our currency is at a discount in relation to its nominal gold value, raising the Bank Rate will not attract a single ounce of gold to this country. If either of these conditions fails, and still more if both of them are absent, the Bank of England cannot have the real control which it formerly exercised with such success.

We know that at the present time the Government frequently borrows heavily from the Bank of England. We know also that we have not a free market for gold. The essential conditions for the effective operation of the Bank Rate therefore no longer exist, and we are bound, consequently, to examine afresh in the light of actual circumstances the policy which guides the financial authorities in making money rates high or low and the methods adopted by them to achieve their object.

TREASURY POLICY

Fortunately we have no difficulty in discovering what this policy is. It has been publicly defined in clear language. In the autumn of 1919, when the Bank Rate was raised from 5 to 6 per cent and the Treasury Bill Rate from $4\frac{1}{2}$ to $5\frac{1}{2}$ per cent, the policy of the Exchequer was definitely declared to be to reduce credit inflation and to restore an effective gold standard. Later, in March of last year, the policy was described as one of first stopping further inflation and then beginning gradually to deflate. At that time the Chancellor of the Exchequer observed that as fast as he had stopped creating credit the banks had created it, and that "the extent of the advances made to trade and to private individuals was such as to endanger and to reduce the amount of Treasury Bills." It would not be difficult to show that the additional credit created by the banks was largely due to demands of traders to enable them to pay their taxes, but I refer to the official statement here in order to show that it was the intention of the Treasury policy to reduce the amount of outstanding credit. In the following month the Treasury Bill Rate was further raised from $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent. and the Bank Rate to 7 per cent. The justification of this rise in rates was stated to be that the Government had been forced to borrow £55,000,000 from the Bank of England on Ways and Means, owing to non-renewal of maturing Treasury Bills to the extent of £64,000,000. Borrowing from the Bank of England enlarged the power of the banks to give credit, and here again the policy was declared to be one of restricting credit expansion.

In May last the Report of the War Wealth Com-

mittee was published and with it a Treasury memorandum, which set out very clearly the financial policy at that time. The keynote of this policy was deflation, but deflation so guarded as not to interfere with production. It was deemed essential that the floating debt should be materially reduced out of surplus revenue, for even if deflation could be secured by the issue of a funding loan, it would be much better for the nation, according to the memorandum, that it should be secured by taxation. Undue deflation was recognised as an evil, but such deflation as could be secured by raising by special taxation from £300,000,000 to £500,000,000 with which to pay off floating debt was considered a proper measure.

It will be seen from the extracts I have given that we have ample material to form a just estimate of the policy which has guided the Treasury during the greater part of the last two years. I do not refer to this policy now with any intention of criticising it; my purpose is solely to examine its meaning. The policy adopted by the Treasury is of the deepest concern to the banks and the whole of the trading interests of this country. It is our duty to understand its meaning, to examine the measures adopted for giving effect to it and to forecast so far as we can the consequences which will ensue.

INFLATION AND DEFLATION DEFINED

Stated briefly, the Treasury policy declared early last year was, first, to stop further inflation, and then gradually to deflate. We must pause at this point to ask what is meant by inflation and deflation. Both terms are used in a variety of meanings, but with one idea running through them.

Inflation is always associated with rising prices, and deflation with falling prices. In the exposition of their policy I understand the Treasury to mean by inflation an increase of purchasing power relative to the amount of goods available for purchase, and by deflation a decrease in purchasing power relative to the amount of goods available for purchase. In this definition purchasing power is measured by the amount of bank deposits and currency in circulation. Purchasing power is in fact something more than this, as private credit given between traders is an important element in it. But inasmuch as private credit inevitably increases or diminishes with the total of bank credit, the measure of bank deposits may be regarded as approximately the measure of the whole.

BANK LOANS

First, then, let us consider inflation. An increase of purchasing power without any corresponding increase of commodities, or a reduction of commodities without any reduction of purchasing power, will each produce inflation, which, if expenditure on consumption remains unchanged, will be followed by a rise in prices. Purchasing power is increased by additional bank loans or advances. I troubled you last year with an explanation of the process by which a credit given by a bank becomes, as it is drawn upon, a new bank deposit and I can start now with the general proposition that we take the first step towards inflation when a bank makes a loan or advance.

We must be careful here not to jump to a hasty conclusion. When we look further into the question we shall find that a serious distinction must be

drawn between the various purposes for which a bank loan is given. The first broad division we must make is between advances required for some purpose of trade or manufacture and advances which enable the borrower to buy something in order to consume it. Loans required for some purpose of trade or manufacture are not usually a cause of inflation. For the time being, it is true, they increase deposits, but they also facilitate production and lead to an increase in the amount of commodities available for purchase. When the commodities are actually sold and the consumer pays for them, the money received is paid by the trader in the ordinary course of business into his bank and goes in reduction of his advance. The tendency of prices upwards, due to the increase in purchasing power, is checked by the greater volume of commodities offered for sale, and when the commodities are actually sold purchasing power is correspondingly reduced. When trade is active, loans increase in amount, but so likewise does production, and in a healthy condition of affairs the volume of credit and the volume of goods expand together, but not to an extent greater than is necessary to satisfy the requirements of the consumer.

OVER-TRADING AND SPECULATION

It happens very often however that good trade leads on to inflation. A period of good trade is one in which prices are tending upwards, and manufacturers, merchants and retail traders are all encouraged by the hope of high profits to buy freely the raw material and finished goods which they require. They buy to sell again in the course of their trade, and their activities speed up the production

of commodities and the delivery of the commodities to the consumer. It is not unnatural that the expectation of a high rate of profit should lead to over-trading. The wheels of industry are made to turn faster and faster, further recourse is had to the banks, and commodities are produced in greater quantities and at higher prices than the purchasers will be in a position to take and pay for when they are offered for sale. The consequent delay in disposing of the commodities will cause the loans to remain outstanding for a period longer than in the ordinary course of trade and a condition of inflation will arise.

The evil of over-trading is enhanced moreover by the operations of a class of persons who buy to sell again but with no purpose of assisting production. I refer to speculators who, anticipating the demands of the trader or of the public, buy commodities with the intention of withholding them temporarily from the market and selling them later at a profit when the immediate shortage has driven up prices. It is often difficult to discriminate between a purely speculative purchase and a legitimate trade transaction, and much that is called speculation in truth serves a useful purpose in the facilitation of commerce. But loans which in fact are only for a speculative purpose increase the volume of purchasing power without adding anything to production and lead directly to inflation.

WHEN DEAR MONEY CHECKS INFLATION

If we look back over the history of the last century, we shall find that every period of trade prosperity has culminated in over-trading and speculation which have been brought to a close by

dear money and a severe restriction of credit. A high Bank Rate is the obvious and proper instrument for putting an end to inflation due to this cause. Dear money operates quickly, and in a case of this kind prices can be brought down to their former level before there has been any general readjustment on a new level. The remedy is appropriate to a particular evil which is temporary in its nature, and should be strictly confined to the period during which the evil is in existence. A high Bank Rate and a severe restriction of credit are most effective checks to speculation, but it must not be overlooked that they are no less certainly a grave impediment to legitimate business.

WHEN DEAR MONEY DOES NOT CHECK INFLATION

If inflation were always due to the causes which I have just described, the problem of dealing with it would be simple. Unfortunately, however, at the present time we have to deal with inflation arising from causes other than those with which we were familiar before the war, an inflation which has not been brought about by over-trading or speculation and which is not temporary in its nature.

In dealing with inflation of the kind with which we are confronted now, dear money and a rigid restriction of credit, so far from proving an effective means of restoring trade to a wholesome condition, can only aggravate our evils. Both sets of causes inducing inflation may be present at the same time, and when this is the case a policy of dear money may be a choice of the less of two evils ; but it must never be left out of sight that the inflation which I will call speculative inflation is necessarily only temporary, whereas the inflation which, to distinguish it in its causes from the other, I will call

monetary inflation must be regarded as more or less permanent.

BORROWING FOR CONSUMPTION

In considering monetary inflation it is necessary to ask you to recall the distinction already made between the different kinds of bank advances. So far I have been speaking of the effect of loans made or purporting to be made for some object of trade or manufacture. The second category of bank loans consists of those made in order to enable the borrower to buy commodities for the purpose of consumption. Goods bought to be consumed are not ordinarily paid for out of an advance by a bank. It may happen now and then that banks make loans for this purpose, but they would be trivial in amount and are not worth considering in the general view of banking transactions. The power to borrow for the purpose of consumption would be strictly limited by the willingness of the bank to lend.

MONETARY INFLATION

There is, however, one case of borrowing for consumption with regard to which there is no such limitation. The inevitable borrowing by the Government during the War, borrowing on a gigantic scale and almost entirely for consumption, compels us to direct our attention to the consequences of this class of loan. The total amount raised in this country for the purpose of the War was about £ 5,800,000,000, part lent by the public and part by the banks. In my address to you last year I endeavoured to show that in the chain of events this borrowing was the primary cause of the great inflation which took place. As the loans remained outstanding after the commodities bought had been consumed, we

reached a true condition of inflation, an immense increase of purchasing power relative to the amount of commodities available for purchase.

It is worth observing that monetary inflation is inevitable in a great war. It is theoretically conceivable that the public might take up the whole of the War Loans issued and find the money exclusively by saving from their ordinary expenditure. There would then be no need to borrow from the banks, there would be no inflation and no rise in prices. But in practice, when dealing with the gigantic amounts which have to be borrowed, such a condition of things is impossible. The Government was forced to have recourse to the banks, and the loans were followed by a rise in prices, the issue of more and more currency and all the accompaniments of inflation.

PROPOSED POLICY OF DEFLATION IMPRACTICABLE

Monetary inflation, unlike speculative inflation, is not a temporary condition capable of remedy by raising the Bank Rate and restricting credit. Prices in this case are forced up over a protracted period of time, wages and contracts of all kinds are adjusted to new price levels, and fresh capital is embarked in business on this basis. In circumstances such as these the first effect of an attempt to force down prices by monetary deflation must be to cause severe trade depression. A declared policy of monetary deflation is a public warning to the trader that he must be prepared to lose on every contract for the future delivery of goods. Owing to the general fall in prices the market price of the goods when he gets them will be lower than at the time when his contract was made. A policy of

gradual monetary deflation, but deflation so guarded as not to interfere with production, is a policy impossible of execution. Trade is never good when prices are declining, but the consequence of a continuous fall in prices entailed by dear money and restriction of credit, and accentuated by heavy taxation, must be complete stagnation of business. We have to recognise the fact that trade is carried on for profit, and if business men know that loss is inevitable they will restrict their activities to the utmost.

EFFECT OF PROPOSED MONETARY DEFLATION

The first effect then of an attempt at monetary deflation of this kind will be to arrest business. A fall in wholesale prices will follow, due to goods being thrown upon the market by traders who are unable to carry their stocks or have failed in business. There will be a diminution in production, profits will be greatly lessened, and unemployment will grow. This will in turn lead to reduced power on the part of wage-earners to spend on consumption and to a further fall in both wholesale and retail prices. Yet the consequences here described can only be the first effects of monetary deflation. The volume of purchasing power brought into existence as a result of the immense War Loans will not have been diminished and it may be expected that this purchasing power will be freely exercised as soon as it is believed that prices have touched bottom. A heavy drop in prices therefore can only be temporary.*

* In reading this sentence and the succeeding paragraph it must be remembered that the remarks were made at a time when drastic deflation was proposed, with a restoration of the pre-war price level as its objective. The impracticability of this policy was demonstrated before it had been carried as far as was originally intended.—R. McK.

There is indeed reason to think that a further period of inflation will follow. In consequence of the trade depression there will be a great decline in national revenue without any diminution of the permanent liabilities of the Government, who will be obliged to increase taxation or to borrow. In the present over-burdened condition of the country, however, new taxes can only be met by traders borrowing from their banks, and it will follow that, whether by the Government or by the taxpayers, recourse will be made to bank loans, and credit inflation will ensue.

HOW MONETARY DEFLATION CAN BE ACCOMPLISHED

If permanent monetary deflation is to be accomplished it can only be by a reduction of the purchasing power brought into existence by the great War Loans, a reduction which can only be effected by paying off part of the National Debt. But there is no means of doing this by the imposition of additional taxation, as suggested in the Treasury memorandum, without bringing immediate ruin upon our commerce and manufacture. I do not want to discuss here the evils of over-taxation, but our experience during the last year has taught us that there is a limit beyond which trade and industry cannot be burdened without grave danger to their strength and permanence. That limit is passed when traders are forced to borrow from their banks in order to meet their liabilities to the tax-collector, and it is a fact that no inconsiderable part of the expansion of credit during the year which has just elapsed was due to this cause. In present circumstances the only source from which funds can be obtained for repayment of the National Debt

is by economy in expenditure, and by this means alone can monetary deflation be effected, or even attempted, without permanent injury to our trade.

EFFECT OF PROPOSED DEFLATION ON GOVERNMENT LIABILITIES

Let us look at the policy of monetary deflation, to be obtained by a high Bank Rate and a restriction of credit, from another point of view. Let us suppose that it were practicable by this process to bring prices permanently down to the pre-war level. What sort of charge would our National Debt then mean to us? It stands to-day at £7,770,000,000, mostly borrowed when money was worth very much less than before the War. With prices back to their former level, the true burden of the Debt would be more than doubled or, in other words, the creditor would receive a huge premium at the expense of the debtor. But let us disregard this fact, so repugnant to every principle of equity and economic propriety, and let us suppose our object accomplished and prices brought back to the 1914 level. The aggregate of our individual incomes and the revenue from taxation would be correspondingly diminished. A penny in the £ of Income Tax would produce, as it did before the War, about £3,000,000.

Economise our national expenditure as we would, we could not escape from the annual charge for interest on the National Debt and unavoidable sinking fund which would be not less than £350,000,000. The charge for War Pensions, £120,000,000, is also irreducible. These two heads of expenditure alone give a total of £470,000,000, which, if we left the whole of the remaining cost of government to be defrayed out of our other revenue,

would call for an Income Tax of over 13/- in the £, a rate absolutely impossible for any country to bear.

I think I have said enough to show that an attempt at monetary deflation of this kind can only end in the strangulation of business and widespread unemployment. I have shown next that this kind of deflation cannot be effected at all unless the cause which produced the inflation is removed, that is to say, unless part of the immense Government loans is repaid, and that there is no means of doing this except by economy in expenditure. We need to stabilise prices, and when inflation is due to temporary causes we must not only check it but force deflation until the former price level is restored. Any premature attempt, however, at monetary deflation by methods, which do not touch the causes that have produced the inflation, must lead to disaster. Great unemployment will ensue, and the nation will be faced with social evils of a different kind, though not less serious, than those resulting from inflation.

HOW DEFLATION CAN BE EFFECTED

At the risk of repeating myself I must remind you that I have been referring in all I have said to monetary deflation of a particular kind, the reduction of purchasing power, brought into existence through War borrowing, by the several methods of heavy taxation, restriction of credit and dear money rates. It must not be overlooked however that deflation can be obtained in another way. If we increase the commodities available for purchase without any increase of purchasing power, we shall deflate and prices will fall. Deflation of this kind can be effected without producing the evils to which I have

just referred. The fall in prices will be very gradual, and though a less rate of profit will be made than if prices were stable, it will be on a larger quantity, and there can still be room for a fair return on capital and a fair reward for labour. This is the kind of deflation at which we ought to aim—a deflation which will be brought about by a larger supply of the commodities we all need, a greater surplus for foreign export, and a larger total of real wealth. This is the deflation which actually took place during the nineteenth century after the Napoleonic Wars. For over thirty years prices fell, not through an artificial limitation of credit and a restriction of business, but by an immense addition to output, which the great industrial inventions of that century rendered possible.

Our financial policy then should be one which will stimulate production and trade. It is not contended that all the after-war troubles of the world can be cured by a change of policy or that the partial loss of our foreign markets can be made good by any financial expedients. The economic troubles and the loss of markets are conditions which must affect our trade, but the fact of their existence renders it the more imperative that our policy should not be such as further to weaken us. It is quite true that we cannot look for real commercial prosperity until the European market is restored. Our industrial organisation has been built up on the basis of an immense international trade. Our plant is designed for mass production, our commercial houses adapted for business on the largest scale. The only condition under which 47 millions of people can live in these islands, not merely tolerably, but live at all, is that our output should be up to the highest level of our industrial

capacity, and that the surplus of goods which we do not consume ourselves should be freely exchanged for the imported food and raw materials which are essential to our existence.

EUROPE NEEDS PEACE

The economic restoration of Europe should to-day be our first concern. If we neglect it our whole foreign trade will contract and decay. The commerce of the world must be considered as one vast whole and if a large section of it is severed from the rest what remains will be gravely impaired. If the broken countries of Europe are not restored even the still solvent states will slip one by one into the general ruin. A remedy must be found, and found quickly. But what remedy? I do not think there can be much doubt as to what Europe needs at the present time. She needs peace; not merely the peace of pacts and treaties, but peace born of the spirit of peace, when the nations "shall beat their swords into ploughshares and their spears into pruning hooks." The Governments of Europe have made peace, but they have not yet accepted the conditions of peace. Once these conditions are accepted the way will be clear before us. The European States will be able to bring their expenditure down to the limits prescribed by their revenue; the issue of paper currency will cease; the exchanges will be stable; confidence will revive, and full employment will follow. These are the terms upon which Europe can be restored, and with the restoration of Europe will come the revival of our own national prosperity.

THE PROBLEM OF UNEMPLOYMENT

January 27, 1922

Two years ago, when we were suffering the discomfort of a rapid rise in the cost of living, it seemed appropriate at our Annual Meeting to take high prices as the subject of my Address. I ventured at that time upon a word of warning. Although the high prices were due to the monetary and credit inflation consequent upon the immense borrowing by the Government during the War, I endeavoured to show that any attempt to drive prices down by a policy of forced deflation would lead to grave trade depression and wide-spread unemployment.

Last year when I addressed you, a policy of deflation had been publicly announced and steadily pursued for a considerable period. I discussed on that occasion inflation and deflation in detail, and outlined so far as I could the monetary, trade and social conditions which arise in either case. We have recently learnt the evil consequences of deflation in the school of experience and this policy has for the time being fallen into disrepute. But unfortunately the lesson has had the effect of turning a considerable body of opinion back in favour of inflation, and we seem now to have in prospect a regular alternation between the two policies, each to be adopted in turn as a remedy for the other. The danger of this proceeding is my apology for touching upon the subject again before I turn to the other matters upon which I wish to address you.

NEED FOR STABILITY OF PRICES

The danger is a real one because of the force of

the appeal which either policy can make to different sections of the public. The trading community require the assistance of the banks and are very much alive to all the arguments against dear money and restriction of credit, which are the accepted marks of a deflationary policy. They know that falling prices, the objective of this policy, mean loss of profit, trade depression and unemployment, and, convinced that deflation is bad, they are apt to think that inflation, the opposite of deflation, must be good. On the other hand consumers suffer acutely under the pressure of high prices and, if not traders themselves, readily assimilate all the undeniable arguments against inflation. For them deflation, the opposite of inflation, is necessarily good. The truth is of course that both are bad. What is needed is stability, the point from which both alike proceed in opposite directions. When we have stability of prices we have a basis upon which trade can be carried on with confidence. Manufacturers, merchants, and retailers, are then able to make their contracts with reasonable assurance that the debts created under the contracts will be paid when due in a currency of the same purchasing value as it had when the obligations were assumed.

The evil of inflation is that it raises prices; the evil of deflation is that it causes unemployment. High prices in any country are marked by a low rate in foreign exchange, and the currencies are most depreciated where inflation has been most rampant. On the other hand the highest percentage of unemployment is found in the two countries in which a policy of deflation was recently pursued. There is a higher proportion of unemployment in the United Kingdom and the United States than anywhere else, although these two countries have

the greatest wealth and the largest volume of foreign trade. The world offers at the present time the clearest examples of the evils of both inflation and deflation. In Russia we see the complete industrial and commercial collapse in which the inflationary process finally ends; while in this country part at least of the trade depression and unemployment, and much of the budgetary difficulty which we see ahead of us, are attributable to the policy of deflation.

CAUSES OF UNEMPLOYMENT

The overwhelming gravity of the problem of unemployment with which we are confronted at the present time has led me to choose it as the central theme of my Address to you to-day. In considering its causes it is natural for a banker to have his attention more immediately directed to the effects of financial policy, but we should be taking a very partial view of the subject if we failed to give due weight to the other influences which have their share in creating the unparalleled amount of unemployment that we have now in this country. We depend so greatly upon foreign trade that external conditions are a factor of first-rate importance; so also are our labour conditions, which in a large degree determine the cost of production; and so too, by its moral as well as its material influence, is the toll levied upon trade and commerce by taxation. It would be impossible within the limits of such an address as this to give more than a bare outline of each of these causes of unemployment, but in the short time at my disposal I will ask you to consider first the state of Europe, next our labour conditions, and lastly the burden of taxation.

ECONOMIC CONDITION OF EUROPE

It would no doubt have been desirable that in the Europe created by the Treaty of Versailles we should have found as good a market for our products as we had before the War. But our responsible representatives, whose freedom of action was restricted by international considerations, could not have their attention solely directed to our trading requirements. The political necessities, which, regardless of economic needs, compelled the dismemberment of Austria-Hungary and the creation of a group of new States without any tradition of organised government, must have been very powerful and may still be too powerful to permit a modification of the present settlement. If the economic needs of Europe were the primary consideration in international policy our course would be tolerably clear. We should recognise at once that modern industrial and transport conditions have brought all countries into such close trading relationship as to make each an integral part of the trading world as a whole. One nation, and still more a large group of nations, cannot be broken up and impoverished so as to destroy its ability to function without throwing the entire machine out of gear. If Russia fails to buy tea in China or India, our Eastern market for cottons is narrowed, the United States sells less raw cotton to us, and our shipping, banking and insurance business is impaired. Illustrations could be multiplied indefinitely, showing how the trade of each country is linked up with that of the whole world. Our own trade cannot recover its pre-war activity whilst so many countries continue in their present broken-down condition, and though our plans to foster our export trade by the

grant of special credit facilities may be a temporary palliative, the only lasting solution of the problem is by the re-establishment of genuine peace and an ordered system of government throughout Europe.

GERMAN REPARATIONS

An essential preliminary of the restoration of Europe is to settle the terms of the German indemnity upon a sound economic basis. While we recognise that political and international considerations could not have been disregarded in settling the amount and form of the demand upon Germany, the subject is one which admits of being treated from a purely economic point of view.

When the German indemnity was first discussed the public expected a huge money contribution by Germany which was to go a long way towards paying for the War. A total figure of £20,000 millions was talked of, our share of which, about £4,000 millions, was to be used to pay off a large part of the National Debt. At a later date the original estimates of Germany's capacity were considerably modified, but even the reduced figures of the Ultimatum of London point to the conclusion that there was no clear idea of the manner in which alone international debts can be paid.

When one nation owes money to another, it is obvious that the debt cannot be discharged by payment in the money or currency of the debtor country except in so far as this consists of gold coin. If the creditor were willing to accept paper, I have no doubt that the printing press would very soon prove equal to meeting any nominal liability. Payment in gold, though possible to a small extent, may be left out of account, as the amount available is insigni-

ficant in relation to the amount of the debt. When then Germany is required to pay large sums periodically to the Reparation Commission, what is really meant is that Germany must export during each period saleable commodities which have a total selling value equal to the liabilities she has to meet.

If this were the whole problem, it would not present any great difficulty. The maximum annual payment Germany could be required to make under the terms of the London Ultimatum is about £400 millions, and there is no doubt that German industry is more than equal to an export of this value. But an industrial country cannot have a large export without receiving imports. Germany has to import a considerable proportion of her raw materials and a certain amount of food, and payment for these must be a first charge upon her exports. The utmost she can pay over to the Reparation Commission is her exportable surplus, and, considering the question only from the point of view of the amount Germany can pay, the problem becomes one of determining the extreme limit to which this surplus could be forced. What that limit may be I do not venture to say, but judging from the experience of the last six months I do not think that it could possibly be made sufficient to meet her liabilities for reparations under the Ultimatum of London.

EFFECTS OF A FORCED GERMAN EXPORT

The more or less, however, of the German exportable surplus obtainable under external pressure is not the only point we have to bear in mind. We have to consider also the other effects of this pressure and how it reacts upon ourselves and our own

trade. After all we exact reparations in order to gain some advantage for ourselves. If the form of the reparations and the means adopted to secure payment do us more harm than good we fail in our object. External pressure means forcing Germany to develop her export trade under penalty of invasion, blockade or such other punishment as the Allies may inflict. But Germany can only export in competition with her trade rivals whom she must undersell in the foreign market. To ensure cheap production she must pay less wages than other nations for an equal labour product, an object she can achieve by depreciating the mark in foreign exchange so as to keep its external below its internal value. So long as this difference in value exists, it affords a premium on German exports, and as the pressure upon her to pay reparations continues, she cannot avoid a progressive depreciation of her currency.

We have seen in recent months this process in action. We have seen how a compulsory depreciation of the mark has stimulated German exports, and as her manufacture competes directly with ours any increase in her trade must be largely at our expense. Perhaps we should not have suffered as much in normal times as we do now when effective foreign demand, owing to the closing of the Russian market and the general disorganisation of Europe, is very restricted; but in the actual condition of affairs German competition at prices far below what is possible for us is a serious blow to our foreign trade, and is one cause of the depression and wide-spread unemployment of the last twelve months.

The injurious effect of a forced German export is not felt by us alone; every market in the world is

disturbed by the depreciation of the mark. In all countries capital has been invested, trade has been organised and millions of workers—I include employers and employed under this name—have found their daily occupation in meeting the requirements of foreign and domestic trade on a certain basis of demand and supply, a basis founded upon the normal capacity and growth of each nation. If now it is sought to force one country to make a gigantic export of goods which, if accomplished, would flood the markets of the world, the whole balance and adjustment of the foreign trade of every nation must be violently upset. Before Germany could meet her full liability, before she could develop her foreign trade to such a degree as to have an exportable surplus of £400 millions a year, the foreign trade of this country, her chief competitor, must dwindle into insignificance.

HOW GERMANY CAN PAY

It will be asked, what then can Germany pay, without injury to us, towards making good the civil damage the Allies have suffered in the War? As to the annual amount, she can pay to the full extent of the export surplus her trade can give her without forcing the external value of the mark below its internal value. As to the form, she can pay in specified commodities, which in our case might include sugar, timber, potash and other materials which are indispensable to us but which we either do not produce at all or in insufficient quantities. She can pay also by the surrender of any foreign securities her nationals may possess, so far as they can be traced, and, if the Allies are willing to accept this form of payment, by the direct employment of her

labour in reconstructing devastated areas. In all that I am saying now I am speaking only from the economic point of view. It is not my province to enter into the sphere of political action. But I cannot help thinking that an agreement founded on a realisation of economic possibilities would be at once more advantageous to the trade interests of the world and more productive in reparations payment itself than successive ultimatums which in due course prove to be impossible of execution.

LABOUR AND RESTRICTION OF OUTPUT

If we pass from the external influences upon our trade which at the present time are affecting us injuriously and turn to our labour conditions, I believe we shall find that here also mistaken economic ideas are at the root of much of our trouble. Every person in this room would, I have no doubt, regard it as the merest commonplace to say that all rules, or customs or practice which by restricting output cause more men to be employed than are necessary to do a given piece of work in a given time, must increase the cost of production and in the long run be harmful to trade. But we should make a mistake if we thought that this was an opinion generally held by workmen. Many workmen of course have as good an understanding of economics as anybody; and it is right to say that so far as I am aware there is no Trade Union regulation, with possibly one exception, which in so many words directly restricts output. But it is not open to doubt that such restriction is very common in practice. We know for instance how usual it is to prescribe a limit which individual output may not exceed, and it is quite customary upon the introduction of a new machine

to insist upon more men being employed than the machine really requires.

Underlying this practice or custom is the praiseworthy purpose of preventing men being thrown out of employment. I believe a large part if not the majority of our workmen think that a restriction of output has this effect. In a country like ours in which trades are greatly sub-divided and every man is confined by habit and training to a particular section of work, the fear of unemployment is the bane of working-class life; and if the unwritten rules restricting output did in fact prevent unemployment, we could not hope to see them given up. But since they do not; since on the contrary the supposed remedy for unemployment is itself a powerful aggravation of the evil, what we need is to convince the workmen that their economic theory is false.

A FALLACY EXAMINED

Let us examine for instance how a rule requiring more men to operate a machine than are needed works in practice. I will take a case in which the actual number required to handle the machine is only two, but the rule requires that three men should be engaged on it. The framers of the rule believe they have achieved their object: they have found employment for an additional man. But is this really so? There is still only work for two men. The third man is paid, but in a true sense there is no work for him. We have yet to examine the question of who it is that pays this unnecessary third man, and to see the effect of this payment upon employment generally.

At first sight the answer to this question is

obvious. The third man's wages are paid by the employer. But like so many obvious answers to economic questions, this, though superficially true, is fundamentally untrue. Let us look for a moment behind the apparent at the real facts of the case. The employer, we may suppose, is executing a contract. He based his tender on the cost of the materials, the total of wages, the overhead charges and the anticipated profit. In his estimate of wages cost he included the third man whom he would have to pay for doing nothing, and his tender was increased accordingly. The wages of the third man were not paid out of the employer's profits but were a charge upon the cost of production and raised the price of the goods he had to deliver.

EFFECTS OF RESTRICTION OF OUTPUT

All restriction of output raises the price of the article produced, and if the restriction operates over a wide enough field, it must increase the general cost of living and thereby reduce the real value of the wages received by all workmen. Combination amongst workmen to raise wages is very different from a combination to restrict output. In the former case the workmen seek to obtain for themselves as large a share as possible of the total earned by the joint efforts of capital and labour; in the latter they seek to increase the number of men amongst whom the workmen's total share is to be divided. They do not see that this is the effect of the restriction of output, because it does not show itself by a reduction in money wages. All that they see is that more men are receiving wages, all of whom are paid at the same rate. They fail to observe that the wages will buy less; or, if they observe it, they

attribute the rise in price to some cause other than the high labour cost.

But the evil consequences of a restriction of output do not end here. Let us go back to the case of three men being required on a machine which two could operate. The contractor, being obliged by this rule to add to his price, may lose the order to a foreign competitor. The whole of his men may then be thrown out of employment, and the very misfortune, which it was sought to avert in the case of a few men only, falls upon the whole body. That this happens we have only too good reason to know. The first effect of a restriction of output is a rise in the cost of living; the next effect is general unemployment. The greatest sufferers are the workmen themselves. They share in the product of their labour as a whole, and, if they did but realise it, are most benefited when each individual member of their body works at his highest efficiency.

I am afraid you may think that I am labouring to prove an obvious conclusion, but I would remind you that we are all apt to turn aside from the narrow path of strict economics when our interests or our preconceived ideas seem to point another way. If we are surprised that elementary economics are sometimes disregarded by workmen we must not forget that they were no less ignored in dealing with German reparations. And when I turn now to the third cause I have mentioned of our bad trade and unemployment, excessive taxation, we shall find here also that economics are treated as of little account.

A NATION'S TAXABLE CAPACITY

It would not be easy—I doubt if it would be possible—to define the limits of a nation's taxable

capacity. Too much depends upon the human factor which varies so greatly in different people. One man will exert himself to the utmost though the tax collector should take from him 10s. in the £ of all he earns; another will be disheartened if he be mulcted of but 5s. in the £. We cannot doubt, however, that taking the nation through there is a limit beyond which, if taxation continues so high as to give only a very small return for additional effort and for the risk of additional capital, it will become a matter of general occurrence that the effort will not be made and the capital will not be risked.

As wealth is created by human effort the greatest care should be taken not to dishearten those upon whose enterprise so much of the industrial progress of the country depends. Looked at from the point of view of national wealth and prosperity, in which we all have an interest, it is bad policy to deprive business men of the stimulus of a reasonable return for their labours. It may be difficult to determine in advance the exact maximum scale of taxation which could be imposed upon us without impairing in any marked degree the national spirit of business enterprise, but we cannot shut our eyes to the signs that our present taxation has probably exceeded this limit.

EVILS OF EXCESSIVE TAXATION

But the question is not merely one of the discouragement of effort. We know that if business is to expand and prosper continuous additions must be made to the capital employed. A growing business—and at every period it is upon the growing business that the progress of the future depends—is

one in which a large part of the profits each year are saved and put back into the concern. By this method the energetic and capable young man slowly acquires the additional capital he needs for development and brings himself to the front. If now the whole or a large part of his savings is absorbed each year in taxes, he is deprived of the means of enlarging his business. New plant cannot be acquired; additional stock cannot be bought; growth becomes impossible. The capital which the keen, active, enterprising man could use to the utmost advantage in developing trade is taken from him and spent unproductively on one of the manifold activities of the State. In such conditions business must become stagnant, and in this country, where the industrial organisation is contrived for expansion and a continually growing production, stagnation means failure.

Let us look at excessive taxation in another aspect. Everyone is agreed that taxation of the poor on such a scale as to deprive them of the means of obtaining the necessities of life is morally wrong. But it is not generally accepted that excessive taxation of the rich is economically wrong. Most rich men do not spend the whole of their income on their own consumption. Some part, and often a very considerable part, is saved, and these savings are lent as industrial and commercial capital. A high Super-tax in the case of the rich is largely a tax upon savings and the money taken by the State is withdrawn from productive use and spent upon consumption. In a healthy condition of a State no more should be raised in taxation than will leave an amount available for capital development sufficient to meet all the needs of business.

EXPENDITURE MUST BE REDUCED

Our present scale of taxation then I believe to be so high as to undermine our national business energy and enterprise and to deprive us of indispensable capital. What is the remedy? There is only one, which we must face with all the determination and resolution at our command. We must reduce expenditure to the utmost limit consistent with our contractual obligations and the supply of indispensable services. If we do so now, we shall quickly recover our national earning power and with it will come the elasticity of revenue which we experienced during the second half of the last century. The ideal of economy, both in public and private affairs, is alluring and popular, but the practice is quite another matter. It is difficult, often hateful and certainly never popular. But to-day, looking at our decline in revenue, the state of our trade and the dangers which confront us, we have no choice. I have no hesitation in saying that, whatever the difficulties, the strictest economy in our national expenditure has become the first and most imperative necessity of our time.

*REPARATIONS AND INTERNATIONAL DEBTS**

October 4, 1922

WHEN I received the honour of your invitation, which I greatly appreciated, I must confess I had many misgivings. I knew it would not be a light task to address an audience whose collective importance in the world of finance is unrivalled. I remembered, however, the cordial friendship which has always existed between American and British bankers, and as I realised that your invitation was a further evidence of this friendship my hesitation gave way and I gladly decided to come.

Let me begin with an explanation of my choice of subject. I thought at first that some professional topic should be selected, but I soon came across a serious difficulty. There is a much greater difference between the law and practice of banking in America and England than is generally supposed, and I felt that I should be liable to be misunderstood unless this difference were constantly borne in mind. This very meeting will illustrate the point. I understand there are over thirty thousand separate banks in the United States, a large number of which are represented here. In the whole of Great Britain we have only thirty-nine. But with us the branch system is so highly developed that these few banks have no less than nine thousand six hundred and fifty branches, of which six thousand eight hundred belong to five banks alone.

The main distinction is that our banks are re-

* Delivered at the Convention of the American Bankers Association in New York City.

garded by the legislature as ordinary corporations or companies, while yours are subject to special legislation in regard to nearly all their activities. You have a limit prescribed to the amount of a loan to any one customer. Certain loans are prohibited and others are restricted. Your investments are regulated. You are subject to limitations in incurring contingent liabilities and you are bound to maintain minimum cash reserves. We have none of these restrictions. Alone amongst deposit banking countries the United States protects depositors, some of the States going so far as to prescribe a system of guarantee. We differ also in our central bank policy. You have adopted the Federal Reserve system under which there are twelve Federal Reserve Banks in twelve districts. In England we have a single central bank of issue, a joint stock corporation which deals with private customers as well as with the Government and the banks. Your Federal Reserve notes are issued against gold and self-liquidating commercial paper. Our Bank of England notes are issued against gold only, with a fiduciary issue of £18,450,000.

The principles of sound banking are the same everywhere, but our countries diverge in law and practice. This is natural: British social and political conditions differ so much from yours that the same banking system could hardly be appropriate to both. Perhaps we have each something to learn from the other, but I am sure any hasty attempt to establish a common procedure in the two countries would be unwise. As our development has progressed each nation has adapted itself to its environment, and such changes as we may make in the future must conform to the habits and traditions of our peoples.

With these thoughts in my mind I found it very

difficult to select a technical banking subject for discussion to-day. However careful I might be I felt that, unless accompanied by much tedious explanation, my language, associated with ideas related to English practice, would be liable to be misunderstood by you whose associated ideas are so different. I resolved therefore to pass over professional banking topics and to look for a subject of general interest to the business community. What should this be? In their report to the Reparation Commission the Bankers' Committee which sat early this summer in Paris laid stress upon the need to resume normal trade conditions between countries and to stabilise exchanges, and they came to the conclusion that neither of these aims could be accomplished without a definite settlement of the reparation and other international debts. Here then it seemed to me was a subject for my address. There will be general agreement that there is no matter of more deep concern to the world's trade at the present time than reparation payments and international debts, and I trust therefore you will not deem it out of place that I have chosen this subject for discussion to-day.

There are two preliminary observations which I must make. The first is that I speak as a banker expressing my personal views. I have nothing to do with politics and I do not appear here in any representative character. I approach the question solely from the economic point of view and my endeavour is to determine so far as I can the limit of the debtors' capacity to pay, and the effect of payment upon the world's trade. Our duty is to satisfy ourselves on the financial possibilities of the case. It is not what the debtors may justly be called upon to pay, but what they are able to pay, which we as

business men, anxious to discover the conditions upon which trade prosperity is founded, must consider with the most careful attention.

My second observation is to meet a possible criticism. How can I, a member of a nation which is one of the debtors of the United States, speak freely to an American audience upon international indebtedness? The primary and essential duty of a debtor is to discharge his liability, and, until this is done, all observations on the origin of the debt and on the economic consequences of international payments are liable to be viewed with suspicion. A creditor may, if he like, open up questions of that kind, but a debtor should admit his obligation without further discussion. I recognise that these are objections which I must answer and I believe that I can do so conclusively. In the course of my argument I shall show that England has the ability to pay, and, once that is established, I can unhesitatingly assert her determination to honour her bond in full. I believe I am justified in asking you to treat England's debt to the United States as certain to be provided for, and, if this be conceded, we shall be free to consider the question of the remaining international debts as one in which America and England are equally concerned and in which both have the same interest as creditors.

First let us look at the magnitude of these international debts. The greatest of all is that of Germany for reparations, a debt of which the United States declined to receive any share. The amount was not defined by the Treaty of Versailles, but subsequently by the London Ultimatum it was put at 32 billion dollars, at which amount it stands nominally to-day. Of the remaining debts the liability of France to the United States and Great Britain is

6½ billion dollars, and of Italy to the same two countries 4½ billion dollars. Russia owes these countries 3½ billion dollars and a further 1 billion dollars to France. These are the principal debts; the others are all comparatively small in amount. Of the creditors of the European Continental Governments England is the greatest.

THE FRENCH INDEMNITY, 1871

We have no record in history of international claims of this magnitude. The indemnity exacted by Germany from France under the Treaty of Frankfort in 1871, in round figures 1 billion dollars, created the largest debt between Governments ever known until the recent war, and is the only precedent we have of a considerable international payment. It is of interest to recall how the liability was discharged. Payment of 150 million dollars was made in gold and silver coin and in German banknotes and currency collected in France, and the balance in foreign bills, chiefly German currency bills. The precise form in which the payment was made is however comparatively unimportant. For our present purpose the significant question is how France procured the means of payment. She was bound to acquire German marks or foreign currency exchangeable for marks, and to do so she had either to find German or other foreign buyers for such things as she had to sell or to obtain foreign subscriptions to her loans. Very considerable sales were made of foreign securities owned by French nationals, the French loans were largely subscribed externally, and the export of French goods was so much increased that an average excess of imports of 65 million dollars a year in

the four years 1868-1871 was converted into an average excess of exports of 46 million dollars a year in the four subsequent years. By September 1873 the whole indemnity was paid, and although France remained liable for the loans she had issued, she was clear of any direct debt to the German Government, and indeed of all foreign debt payable in any but her own currency.

Here we have an example of a very considerable international debt rapidly paid off without any serious disorganisation of the world's trade. Now what were the conditions which made this possible? The war had been short, and the amount of the indemnity was well within the capacity of France to pay. Her nationals held large blocks of foreign securities, which were realisable in foreign markets; her credit was good, which enabled her to obtain foreign subscriptions to her loans; and in her effort to increase her exports she was not hampered by high tariffs. She was not driven off the gold standard and, although there was some decline in the value of the franc, the depreciation never exceeded 5 per cent and, taking the whole period through, amounted to barely more than 1 per cent. But of the several factors in the French ability to pay the most important lay in her accumulated reserve of wealth, the foreign securities owned by her nationals.

It is interesting to note the industrial condition of France at that time. Employment was extremely active and production was on a great scale. She had to meet her external liabilities, which compelled her to increase her sales in foreign markets, and she did so notwithstanding the competition of other nations. The improved standard of efficiency in production which was thereby forced upon her endured long

after the period of the indemnity. In Germany on the other hand there was a very different experience. The receipt of a large amount of gold and silver had, with other causes then in operation, a serious effect upon German internal prices, which rose rapidly. In 1872 there was a brief trade and financial boom, followed in the ensuing year by a crisis which was the beginning of a period of depression. It would not be correct to say that the trade conditions in Germany were entirely due to the payment of the French indemnity, but undoubtedly it was a contributory cause of material importance. The comparative prosperity in France and depression in Germany are remarkable and give colour to the story that Bismarck, in commenting upon the state of the two countries, declared that the next time he defeated France he would insist on paying an indemnity.

Such is the only precedent we have for the payment of a great international debt. The figures we have to deal with to-day are on a far larger scale than the indemnity exacted from France fifty years ago, but the problem in all essential particulars is the same. We have to discover the capacity of the debtors to pay and to consider the consequences of payment. As the indemnity demanded from Germany is much the greatest of the debts and is the one most urgently in need of a satisfactory settlement I place it in the front of our discussion.

GERMANY'S CAPACITY TO PAY

The first question is, what is Germany's capacity to pay? You are perhaps expecting that I am about to give you an inventory of Germany's natural resources and an estimate of her productive power.

All this has been done many times and much industry has been displayed in the inquiry. I have no doubt that the experts who advised the signatories of the Treaty of Versailles that Germany could pay 120 billion dollars had made many careful calculations of this kind. But what we have to investigate is not Germany's capacity to produce wealth but her capacity to pay foreign debt. I cannot help thinking that we have here the source of the error into which the Versailles experts seem to have fallen. Nobody has ever doubted Germany's immense power to produce, but production by itself is not enough. She must find a market for her exports, and the problem thus becomes one of determining the possible extension of German export trade. Nor is this the end. We must remember that an increase in her exports will only provide funds for reparations if there is no corresponding increase in imports. Payment for her indispensable imports must be the first charge upon the proceeds of her foreign sales, and it is only the balance, the exportable surplus, which is available for reparations.

In speaking of a nation's exportable surplus we must not forget that other factors may contribute to it besides the balance of exports over imports. Interest received from foreign investments and payment for external services, such as shipping, may be contributory factors. Before the War Germany possessed a very considerable exportable surplus derived from all three sources, but mainly from the interest on her foreign investments which were probably worth not less than $5\frac{1}{2}$ billion dollars. As regards the surplus from the sale of her products and payment for services it is safe to say that it never exceeded 100 million dollars a year. But what is her position to-day? Most of her foreign invest-

ments have gone. Some were sold during the War, others have been seized as enemy property by the Governments of the Allied and Associated Powers, and most of what remain have lost their value as in the case of the Russian investments. Her shipping has been largely confiscated, and she has been deprived of some of her most productive areas—Alsace-Lorraine, the Saar Basin, and the Polish provinces. All the sources whence an exportable surplus might have been drawn have been greatly impaired if not wholly destroyed. At no time was Germany's exportable surplus sufficient to enable her to make the annual payments demanded under the London Ultimatum; it is entirely out of the question that she could do so to-day.

But let us get a little nearer to the problem of Germany's present capacity to pay from the surplus sale of her production. According to a recent statement by the Chancellor of the Exchequer in the House of Commons she has paid money and delivered property altogether to the value of about 2 billion dollars. Of this amount 1,645 million dollars represented the value of ships, coal, other payments in kind, property in ceded territories and local payments to Armies of Occupation. The amount in cash has been only 375 million dollars. And yet, with this comparatively small cash payment, observe what has happened. The mark has declined to less than one-seventieth of the value it had when the obligation to pay was imposed upon Germany by the Treaty of Versailles. The means of payment has been found by the sale of marks. After this experience it is difficult to believe that Germany has any surplus at the present time from the export of her products.

There is a further consideration in support of this

conclusion. It is beyond question that in the last three years Germany has made every effort to develop her external trade. The German workman, whose industry and efficiency are generally admitted, has been fully employed and the factories have been actively at work all over the country. The decline in the mark, which at every stage has been much greater in the external than in the internal value, has afforded a very considerable advantage to the German exporter, so much so indeed that there is hardly anywhere a manufacturer, producing goods for export, who does not complain of German competition. Nevertheless the German trade figures show that the exports, long after the immediate deficiency in essential foreign commodities due to the War was made good, are still barely equal to the imports. The conclusion seems irresistible that Germany has no present capacity to obtain a surplus from the export of goods.

I am not sanguine enough to believe that those who think they can extract from Germany enough money to enable them to meet the internal liabilities, which they themselves have incurred in restoring devastated areas, will be satisfied with the statement I have just made. At the recent Reparation Conference of the Allied Powers held in London proposals were made of punitive measures to be taken with the object of compelling Germany to make immediate cash payments, a policy which could only have been advanced under the conviction that Germany really could pay. For my part I do not believe that it is within her power to do so, but let us suppose for a moment that she can. We have then to consider what the effect of this enforced payment

would be upon international trade, and whether it would be to the advantage either of Germany's creditors as a whole or of the rest of the world.

If Germany could pay what is demanded of her, the only method of obtaining the money would be by increasing her exports. Now what are these exports to be? She is essentially a manufacturing nation. Her foreign sale of raw materials is comparatively small. On balance she is obliged to import food, and in consequence of the loss of a large part of her mineral lands she is compelled to import both iron ore and coal for the supply of her factories and furnaces. An increased exportable surplus could only be obtained by extending her sale of manufactured goods. To do this in the teeth of the competition of other manufacturing nations she must work longer hours for less wages, she must cut profits, she must reduce her imports to the indispensable minimum. But her competitors will not consent to stand idle while they lose their trade. They will find themselves faced with growing unemployment and heavy trade losses. So far as German goods seek to invade their own domestic markets they may endeavour to exclude them by tariffs, but in order to retain their hold on neutral markets they too will be compelled to reduce wages and cut profits. And thus Germany's effort to extend her foreign trade must be confronted with the opposition of the whole manufacturing interest of the rest of the world, and could only be successfully countered by a general lowering of the standard of life.

I know it is frequently alleged that the collapse of the mark with the accompanying disorganisation of the world's trade might have been avoided if the German Government had acted with firmness and

good faith. It is said that Germany has intentionally depreciated her currency in order to induce her creditors to abandon their claims. We are told that her people are not adequately taxed and that, if they were subject to the burdens borne in some other countries, the Government would be able to meet its liabilities. It is certainly true that in my own country far heavier taxation is levied than in Germany, but I am inclined to think we are over-taxed and that overtaxation so far from fostering cannot fail to depress national production. But whether I am right or wrong in that opinion I fail to see how additional taxation can stimulate foreign trade and provide a larger exportable surplus. The taxes would be paid in marks, and whether the marks are derived from avowed taxation or from concealed taxation through the use of the printing press, they are in neither case a currency which would be accepted in discharge of foreign liability.

In the actual condition of Germany a foreign sale of marks is an inevitable accompaniment of the payment of reparations. Except by such sale there does not appear to be any practicable method for the Government to obtain the necessary foreign currency other than by exacting it from exporters as a condition of their receiving an export licence. But the exporter, who often has external obligations of his own to meet, does not want marks but dollars or pounds sterling, as the case may be, and forthwith sells the marks paid him by the Government for the currency he needs. If we add to this regular sale in the course of business the further sale by Germans who mistrust the stability of their own currency, we have a sufficient explanation of the stupendous drop in the value of German money.

Let me come back now to the question of what

Germany can pay. Certainly she can pay something, though not in the form or under the conditions it is now sought to impose upon her. Many Germans possess foreign assets, whether investments or balances in foreign banks, and it would be a perfectly practicable proceeding for them to sell these assets to the German Government, who in turn could hand them over to the Reparation Commission. But it is an essential condition of such a transaction that the owners of the foreign assets should be willing to sell them; no Government in the present situation of Germany could force a compulsory sale. How then could this consent be obtained? I have no doubt that if these assets could be sold for an assured profit the holders would be willing to dispose of them. It must be remembered that to a considerable extent they are the proceeds of sales of marks which have been flung by Germans on the foreign market under the well-founded apprehension that the pressure of reparation payments would rapidly depreciate their value. Relieve this pressure and the mark would immediately improve. It has still a far greater value in Germany than it has outside, and the German holders of foreign assets would have a clear advantage in selling them for marks to their Government.

It is impossible to give any precise estimate of the total value of these assets, but I believe it would be safe to put them at not less than a billion dollars. Whatever the amount may be, however, Germany could pay it, provided the fall in the mark was arrested. More than that I do not think she has the ability to find, at any rate for some years, and it would be a condition of this payment that no more should be demanded of her for a long time to

come. I believe that, looking merely at the amount to be received, the creditors would gain by abandoning the attempt to obtain other money payments for a period of at least three years, and I am quite sure the world as a whole would be an immense gainer in the general stabilisation of exchanges which would ensue upon an arrest of the fall in the mark.

Before I leave this part of my subject there is one observation I should like to make. I have no wish to minimise the just claims of the Allies against Germany, and I recognise the serious political difficulties which stand in the way of their abatement. But no solution of the reparation problem is possible unless political considerations are subordinated to economic facts. What Germany can pay may not be a simple question, but it is a question capable of being answered. Unfortunately the answer runs counter to popular hopes, popular passions, and, more formidable still, a popular sense of natural justice which prescribes that the defeated enemy who planned the War should make good the damage suffered by the victors. And so no authoritative answer is given while Europe slides into ruin.

THE INTER-ALLIED DEBTS

I have dealt at length with the reparation problem in an endeavour to show that a nation, except in so far as it has an exportable surplus, can only pay foreign debt out of the wealth it has accumulated outside its own country. If we pass now to the other international debts we have to recognise that the general argument is equally applicable to them all. Have the debtors an exportable surplus and

what are their foreign assets? With regard to the latter question the only debtor possessing any large accumulation of such assets is England. Notwithstanding her immense sale of securities to the United States in the second and third years of the War, a sale which largely furnished the means of paying for the goods of all kinds bought by the Allies, England still owns sufficient foreign securities to cover her debt to the United States two or three times over. But neither France nor Italy has similar reserves of wealth, and I doubt whether either of them has sufficient to meet more than a trifling part of its foreign debt.

There remains to be considered their exportable surplus in the ordinary way of trade. I shall speak later of the circumstances in which an exportable surplus from production usually arises, and I shall give my reasons for thinking that nothing more than comparatively small annual payments can ever be made in this way. But it will be more convenient now to deal with an individual debt, and I will ask you to consider the particular case of the debt due from France to England, which I can speak about with more freedom as it is a debt in regard to which my own country is the creditor. We shall get a clearer view of it if we examine the circumstances in which it was incurred.

During the War France developed an immense demand for goods of foreign production. As an increasing proportion of her man-power became engaged in her army, her capacity to supply herself was progressively reduced. She had no abundance of foreign securities with which to pay for her requirements and she could obtain the war materials indispensable for the maintenance of the fight in no other way than by borrowing the money

to pay for them. Before the United States came into the War France had borrowed 1 billion dollars from the British Government, and this amount was subsequently increased to over 2½ billion dollars. The price of the goods bought by France was naturally high. Commodities produced to meet an urgent war need can never be cheap. But France was obliged to have the goods, whatever the price, and a great stimulus was given to American and British trade.

Let us now reverse the process and imagine France paying off this debt. She could only do so by producing goods and exporting them in very large quantities, far in excess of normal trade demands. If the general trade organisation of the world permitted of the absorption of this additional French output, I have no doubt that her industry would be capable of the effort necessary to enable her to pay interest and sinking fund on her debt. But would there be any willingness to receive the goods? Neither England nor any other country is prepared to-day to pay for and consume goods on an exceptional scale. The immense demand created by the War has no parallel in peace. And yet how is France to pay unless an exceptional demand exists? The truth is that her debt is far too great in relation to ordinary international trade possibilities. It was incurred by the purchase of goods required in war and bought at war prices. It could only be discharged by the transmission of goods, not wanted in peace, and sold at no less high prices. We became accustomed in war to talk in billions. Our language was suited to the circumstances of the time, but, if we carry our minds back to 1914 and return to the ideas appropriate to peace conditions, we shall recognise at once that France has no trade surplus or reserves of accumulated and

exportable wealth to enable her to meet her present external liabilities.

There are of course conceivable, though I trust improbable, conditions in which the French debt to us might be repaid. If we were at war and the call upon our men to line the trenches was such that many of our mines and factories had to close down; and if France were at peace and at liberty to increase her output to the utmost of her capacity she might pour upon our shores war material and stores equal to the whole amount of her debt to us. But in what part of the globe is there a demand for this additional output in time of peace? The mere endeavour to extend her foreign sales to the necessary degree would disorganise the trade of the world. We have seen the painful effect of an enforced competition by Germany; we should experience precisely the same results from a similar effort by France.

The inevitable conclusion is that these international debts are far too great for the capacity of any of the debtor countries except England. She alone in her accumulated foreign investments has adequate resources with which to discharge her liability to the United States. Of the others, France has the greatest resources, but they are, I believe, quite insufficient to meet her obligations. The whole subject requires a rational reconsideration by the creditors, who must keep steadily in view the immediate effect of the payment of these debts on the general trade of the world. The creditor countries will obtain greater advantage from trade prosperity, which will ensure full employment in their factories and workshops, than they can ever receive from the precarious payment of these debts. In the last two years we have had experience of the

effect upon foreign trade of tumbling exchanges and broken-down credit, and though the consequences may be more serious in England than in the United States, where foreign trade is comparatively only a small part of the total trade, they are still grave enough in the latter country also to warrant the fullest and most careful consideration.

It may be objected that my argument appears to lead to the unpalatable conclusion that no nation, unless it has accumulated resources in the form of foreign investments, can discharge external obligations to anything more than a comparatively small amount. This is an objection which goes to the very root of the question of international loans and forces us to a consideration of the real meaning of an exportable surplus. I cannot do more than touch upon it briefly now without stretching your patience beyond the limit of extreme good nature.

It seems to me that the most compact form in which I can present the case is by calling your attention to the experience of England as a creditor country. For over two centuries British capital has been lent to other countries. Year by year England produced more than she either consumed herself or could exchange for the products of other nations, and she could not obtain a market for the surplus unless she gave the purchaser a long credit. Foreign loans and foreign issues of all kinds were taken up in England and the proceeds were spent in paying for the surplus production. British factories and workshops were kept in good employment, but it was a condition of their prosperity that a part of their output should be disposed of in this way. Taking the aggregate of the transactions British creditors have received a good return on their investment, but the ability of the debtors to pay

has been dependent, speaking generally, on the development of their country being fostered by the receipt of further loans. If we take the whole field of British foreign investment we shall find that every year England has returned in loan more than she received in interest, and the balance of the world's indebtedness to her has been steadily growing.

From this view of loans made to foreign countries they might seem at first sight to be somewhat unremunerative. If the creditor has to go on lending in order to be paid the interest on previous loans, a bad debt would appear to be the only possible end to the business. But this is by no means the case. While this continuous lending has been true in the past in the aggregate of foreign loans, it is not necessarily true in any individual instance, nor does it follow that it will always be true of the loans as a whole. In our experience as bankers it is not uncommon to see loans to corporations and firms justifiably increasing in amount. The borrower may show by the growth of his business and expanding turnover that such advances are thoroughly warranted, and in spite of his greater total of indebtedness his credit may be improving and his balance-sheet may disclose an increasing surplus. What is true of an individual or corporation may be true of a country, but on a larger scale and viewed over a much more extended period of time. The life of an individual or even of the most successful company is as nothing compared with the life of a nation. Take the case of your own country. The United States has been the greatest external borrower in history. You required foreign capital for your internal development and you took from England alone not less than 3 billion dollars. It is estimated that at the time of the outbreak of

the war your external debt had become stationary in amount, and that your exportable surplus of commodities sufficed to pay the whole of the interest. Repayment of the capital, however, would have been beyond even your capacity for a very long period had it not been for the opportunity afforded by the War. As you know there arose then an inexhaustible demand in Europe for American goods which led to an immense increase in your exports. Payment for these exports was largely made out of the proceeds of the sale of stocks and bonds held in England, and thus a capital liability which had been growing for over two centuries was almost entirely discharged in a few years.

We see then that a debtor nation may in certain circumstances pay off its foreign debt with remarkable ease and rapidity. The indispensable condition for such rapid repayment is that there should be an extraordinary demand for its goods, a demand which is a natural accompaniment of war but does not exist in peace. I cannot help thinking that there has been a general, though very natural, misunderstanding of the conditions under which international payments are made. In its present magnitude the subject is new. In the past we have been accustomed only to the discharge of comparatively small liabilities between nations which has been effected partly by the remittance of gold, and partly by an extension of export trade facilitated by a fall in the exchange of the debtor country, and it is not easy for us now to free ourselves from the ideas we have formed in the course of our past experience. Mistaken opinions on these economic questions are not surprising, but they are causing grave disasters throughout the world. It is not many years ago—it is well within my own recollection—that a want of

understanding of sound principles of banking led to repeated financial crises which were then believed to be inevitable. As they usually happened at intervals of ten or eleven years many serious persons attributed them to the variations which occur in the spots on the sun. These spots may affect the weather, and, through the weather, the harvest, but a wider knowledge of banking and of currency requirements has taught us how to escape their malign influence on credit. A better understanding of international trade and of the possible limits of international payments will quickly enable us to find a remedy for the evils which now distract us. The public on both sides of the Atlantic are beginning to take a more rational view than was possible three years ago, and if the leaders of opinion direct our footsteps along the right path I believe the world is now prepared to follow it.

To sum up: the conclusion to which I am driven is that Germany can only pay now whatever she may have in foreign balances together with such amount as she can realise by the sale of her remaining foreign securities; that this payment is only possible if all other demands are postponed for a definite period long enough to ensure the stabilisation of the mark; and that future demands at the expiration of this period must be limited to the annual amount of Germany's exportable surplus at that time. Further, that England has the capacity to pay to the United States interest and sinking fund on her debt; but that the other debtors are none of them in a position to meet more than a small part of their external liabilities, and in the existing condition of Europe a definite postponement of any payment by them is desirable in the interests of all the parties. The actual amount which

the other debtors could ultimately pay should, as in the case of Germany, be ascertained by enquiry into their exportable surplus at a full and frank conference between creditors and debtors.

It remains only for me now to thank you for the patience with which you have heard me. I have strictly confined myself to a consideration of the economic aspect of Reparations and International Debts, how they are payable, the general capacity of a debtor country to pay, and the effect of payment. If I have become convinced that an attempt to enforce payment beyond the debtor's ability is injurious to the international trade of the whole world, lowers wages, reduces profits and is a direct cause of unemployment, the conclusion is founded solely on economic grounds and is uninfluenced by any political considerations or any regard to the moral obligations of the debtors. I know very well that there are other considerations affecting these debts, but these are matters of statecraft to be determined by the rulers of the creditor countries according to their view of wise policy, which covers many interests besides those of trade and finance. The fact that a debtor cannot pay does not of itself discharge the obligation. The debt may become the subject of negotiation and bargain by which, if the debtor obtains relief, the creditor may still recover some advantage to which he may be justly entitled. But I conceive it to be the duty of bankers to help so far as they can in forming a sound public opinion upon the financial and commercial aspects of these international debts, and it is in pursuance of this duty that I have ventured to make these observations to-day.

CURRENCY, CREDIT AND TRADE

IMPORTANCE OF MONETARY POLICY.

January 25, 1924

It is more than three years since the returns of unemployment first showed a distressing increase. We are accustomed to the cyclical movement in which good and bad trade follow each other in regular succession, but the duration and intensity of the present period of depression are unprecedented in modern experience. The excessive number of unemployed has been the avowed cause of a premature General Election, and the three great parties in the State have all laid stress upon the need for dealing with unemployment as a principal part of their policy. No subject is of greater importance or more worth careful study, and I propose now with your permission to say something upon it before I deal with the work of the Bank during the past year.

It is unnecessary to dwell upon those causes of bad trade with which we are all familiar. The destruction of accustomed markets through the economic breakdown of a large part of Europe, political disturbance or uncertainty at home and abroad, violent changes from one type of demand to another at the close of a great war, the drain upon the essential supply of capital by over-burdensome taxation—all these are conditions gravely injurious to trade and, so long as they persist, cannot fail to retard our full recovery. If I do not refer to them now it is not because I ignore their significance but because of the limited time at my disposal. The

particular influence on trade upon which I propose to speak is that of monetary policy, a matter which I believe to be of much greater importance than is generally recognised and which certainly merits close examination.

MONETARY POLICY DEFINED

What is meant by monetary policy? Before I answer this question let me define the sense in which I shall use the word money. I understand by it all currency in circulation among the public and all bank deposits drawable by cheque. Usually when we speak of anyone having so much money we include the value of his land, securities and other property. It is a convenient form of expression, but it is not a strict use of the term. The meaning I am giving to it is confined to what is immediately spendable by the owner and does not cover the saleable value of property. In this sense it is limited to the total of bank balances both on current and deposit account together with the total of currency in active circulation.

To define monetary policy in few words I should say that it is the policy which concerns itself with regulating the quantity of money. As I shall show later it is controlled by the Bank of England, but the action or requirements of the Government may seriously affect it. If we are to follow the working of a monetary policy and form a judgment upon its merits we must know first how additional money comes into being and how money already created ceases to exist; and, secondly, we must understand what are the consequences of a variation in the amount of money outstanding in the different circumstances which may attend the change.

HOW MONEY IS CREATED

Under the system which prevails in our country, there is only one method by which we can add to or diminish the aggregate amount of our money. Gold coin is no longer minted, and additional paper currency is not issued except to meet the demands of the public. When the public require more currency they draw it from the banks and deposits are reduced as currency in circulation is increased. The amount of money in existence varies only with the action of the banks in increasing or diminishing deposits. We know how this is effected. Every bank loan and every bank purchase of securities creates a deposit, and every repayment of a bank loan and every bank sale destroys one.

People often talk of money going abroad or of foreign money coming here, but as a fact when gold is not in use money is incapable of migration. The title to money may change. An individual may sell his sterling to an American for dollars, but the American will then own the sterling in England and the Englishman dollars in the United States. If there is pressure to sell sterling the exchange value of the £ will be lowered and temporarily the burden of British payments in America will be increased. But the change of ownership does not remove the money, which necessarily remains and can only be expended where it was created. No exchange transaction, no purchase or sale of securities, no import of foreign goods or export of our own can take money out of the country or bring it here. Those who wish to be meticulous may say that British travellers sometimes carry currency notes and change them in foreign countries, but the total of such transactions is too trifling to be taken into

account. Bank loans and their repayment, bank purchases and sales are in substance the sole causes of variation in the amount of our money.

While banks have this power of creating money it will be found that they exercise it only within the strict limits of sound banking policy. Any one who studies the monthly statements of the London Clearing Banks will see that these banks keep a reserve of cash fairly constant in relation to the amount of their deposits. If banks increased their loans and investments the result would be to increase the aggregate amount of their deposits but to add nothing to their cash resources. The proportion of cash to deposits would be reduced and, in the judgment of those responsible for the management of the banks, would be less than sound banking principles dictated. Thus a limit is placed on a bank's power of lending by the amount of its cash and, so long as the canons of conservative banking are conformed to, additional loans can only be made if this cash is increased. Banks lend or invest up to the full amount permitted by their cash resources, but they do not go beyond that point.

HOW BANK CASH IS CREATED

If what I have said so far is accepted it follows that any variation in the amount of money in the country is conditional upon a variation in the aggregate amount of cash held by the banks. The next problem to consider then is the method by which this cash is increased or diminished. There are only two ways of adding to or reducing the cash resources of the banks. The first arises from the action of the public. If less currency is required in circulation and the surplus is paid into the banks their cash

resources are increased; and conversely, if more currency is required in circulation and larger amounts are withdrawn from the banks, their cash resources are reduced. There are daily fluctuations in the cash held by the banks due to this cause, but the variation on this account is of minor importance. Over longer periods of time, if trade is improving or declining, or if inflation or deflation is in active operation, the difference in the amount of currency required by the public may be considerable, and the consequent reaction on the cash resources of the banks will be of first-rate importance. I shall deal with this subject later on, but for the moment it is sufficient to note that the currency requirements of the public are the first cause of variation in the amount of cash held by the banks.

The second and principal cause of movement is action by the Bank of England. We have already seen that every loan or investment by a bank creates a deposit, but a loan or purchase by the Bank of England has a further effect. It creates bank cash, or in other words adds to the banks' cash resources. Let me explain how this happens. Suppose the Bank of England invests a million in War Loan. The seller receives a draft for £1,000,000 and pays it into his own bank which will consequently increase its balance with the Bank of England by that amount. Actually a million of bank cash will have been created which will become the basis of new bank loans. The repayment of a Bank of England loan or a sale of securities by that Bank has the opposite effect. It cancels so much bank cash and forces the banks, unless they abandon their established ratio of cash to deposits, to call in loans or sell investments. The Bank of England may make loans or enforce repayment by modify-

ing or increasing the severity of its terms. It may buy gold or sell gold; it may buy securities or sell securities. Every transaction of this kind leads to a variation in the amount of money in the country and by this means exercises a powerful influence on trade.

MEANING AND IMPORTANCE OF MONETARY POLICY

We can appreciate now the meaning and importance of monetary policy. Money, except the customary minimum which we carry in our pockets, is never left idle; it is always pressing for use. If there is more of it, trade is stimulated; if the amount is reduced, trade is depressed. One man may tell you to increase it indefinitely and keep trade booming. But if you do, prices will soar indefinitely. You will first suffer innumerable social evils, and finally the extreme depreciation of your currency will gravely impair your power to trade. Someone else may urge you to reduce the amount of money and bring down prices to the pre-war level or to such other arbitrary level as he happens to think the right one. Yes, and trade will remain depressed and the unemployed will be with you all the time. Moreover the burden of the National Debt with the higher value of money will become intolerable and no Chancellor of the Exchequer will be able to balance his budget. Inflation and deflation, the whirlpool and the rocks, lie on either side of us, and if we are to avoid shipwreck the controllers of our monetary policy must steer a middle course.

I should have hesitated to discuss a matter which lies in the province of the Bank of England, were it not that I share to the full the high respect and admiration for that institution which are felt not

only in the City of London but throughout the world. I disavow any thought of criticism; I am simply endeavouring to explain. The prudent policy of the Bank of England has been for scores of years the backbone of the credit structure of this country. No institution has ever been conducted over a long period of time with a more unselfish regard for the true interest of the public or with a stronger desire to maintain the highest principles of sound finance. But the Bank of England is not entirely a free agent, although the independence of the central bank of issue should as far as possible always be preserved. It is less independent to-day than before the war. It is no longer the principal authority for the issue of paper currency. It is bound to conform to the requirements of the Government and these requirements have expanded enormously with the growth of the debt and of national expenditure. The monetary policy which the Bank of England might wish to pursue may be over-ruled by Government necessities. All I can do, or wish to do, is to lay before you the considerations which must be present to the minds of those responsible for framing the policy.

TRADE REVIVAL DEPENDENT ON BROAD CASH BASIS

I think it will be generally accepted that if the price level be unchanged an increase in the volume of trade will require an increase in the volume of bank credit and currency, that is to say, of money. The proposition stated in these general terms is of course subject to qualifications, none of which however really affects its essential truth. It takes no account for instance of a possible increase in the private credit given between traders, or of a quicker

turnover which would enable the existing bank credit to do more work. The latter is indeed a factor of some importance, as if the banks sold part of their investments and lent the proceeds to trade, turnover would certainly be accelerated. But in present circumstances I do not think it can be disputed that a considerable improvement in trade must take place before we are likely to have any great change in the rate of turnover or any noticeable increase in private credit, and we may therefore take the proposition as it stands without dwelling further on its qualifications.

Let me repeat my statement. If the price level be unchanged an increase in the volume of trade will require an increase in the volume of money. You will observe that I say "if the price level be unchanged," a condition which makes the proposition really a truism. For if trade improves and more goods are produced, prices will fall unless there is an increase in money. Purchasers with the same amount of money will be competing for a larger supply of commodities and these conditions must inevitably bring about a drop in prices. It follows that when trade is improving and the unemployed are being absorbed into industry, if the price level is to remain stable, monetary policy should be directed to an increase in the supply of money.

We can take an illustration from current events. Large orders have been given recently by the railway companies with the express intention of finding more employment. The firms which have taken these orders will require more credit from the banks for the purpose of paying wages and buying raw materials. If the banks are to give this credit and at the same time maintain their recognised cash standards, one of two things must happen: either their

cash resources must be enlarged, or they must restrict their grants of credit in other directions. But if other borrowers for industrial purposes have their credits cut down, their capacity to trade will be reduced, and we shall lose in employment in their trades what we gain in employment on the railway orders. If there is to be an increase in the total of employment the banks must obtain additional cash resources, and this can only be effected by the Bank of England letting out more money.

The essential condition to justify an addition to the supply of money is that a greater volume of goods should be in course of production. If more workpeople are employed more goods will be produced, and we have therefore in the movement of the figures of the unemployed one of the indications which should direct our policy. We must be careful however to recognise that the unemployed returns include a certain number of unemployable and that when we get down to this residuum an additional supply of money will not be accompanied by an increase of production. The only result will be higher prices, and a true condition of inflation will arise. Shortly stated, the argument is as follows. When national output is below productive capacity, the policy should be to let money out; when production is at a maximum, the outflow of money should be checked and, if inflationary symptoms have appeared, money should be withdrawn.

We must remember that however unpropitious trade conditions may be, human energy and enterprise are constantly striving for new markets, more effective organisation, easier and cheaper processes of production. Amongst an active and progressive people trade is always trying to recover, and it will get its way even in the most unpromising conditions

if it be allowed free play. But no trade can stand up against a continued decline in the purchasing power of the public. Less money means lower prices or less production or both, and orders will be withheld so long as there is an expectation that prices will fall. We have deliberately to make up our minds as to what we want. If we mean to get rid of unemployment we must have more money in existence to take up the increased production; if we mean to reduce our present amount of money we shall not escape continued unemployment.

Ups and downs in trade we are bound to have, but wise monetary policy can always prevent the cyclical movement from going to extremes. The speculative excesses of an inflationary boom and the cruel impoverishment of a prolonged slump can both be avoided. They are not necessary evils to which we must submit as things without understandable or preventable cause. They may at least be mitigated as indeed we can see from our own experience. Although we suffered from booms and slumps before the war we never had them in the extravagant degree we have since endured. There existed in pre-war days a check which though fortuitous and inadequate sufficed at least to prevent the worst excesses. That check we have now lost. It arose from our monetary system, but it came to an end on the passing of the gold standard and the introduction of the Treasury Note.

GOLD AS PRE-WAR BASIS OF CREDIT

When we examine the actual working of our pre-war monetary system we discover that the operations necessary for the maintenance of the gold standard had an effect extending far beyond the

sphere of sound currency. The wider results may be regarded as a by-product, but the fact remains that these operations were a principal element in regulating the cash resources of the banks. I have already explained that an expansion of bank credit is an essential accompaniment of sustained trade revival; and further that additional bank credit requires an increased cash basis which can only be furnished by a loan or purchase by the Bank of England. Before the war gold was constantly flowing into London, and if it was tendered at a fixed price to the Bank of England that institution was compelled to buy it. Here we had a purchase by the Bank of England creating additional bank cash and enabling the banks to make additional loans. The purchase was not made with this object in view; it was part of the working of the system with London as the world's free market for gold. But its effect nevertheless was what I have described. It is unnecessary now to discuss the measures adopted by the Bank of England to accelerate or retard the flow of gold. For our present purposes it is sufficient to observe that gold was in fact constantly coming into the country and was bought by the Bank of England. The flow of gold into London provided a potential reserve which was always available as a basis for the creation of additional credit for trade purposes.

GOLD NO LONGER FUNCTIONS

A particular feature in the working of the pre-war system stimulated the demand of the Bank of England for gold at a time when its purchase was most essential for trade expansion. If conditions were such that more currency was required in circulation the Bank of England was compelled to buy

gold in order to maintain its reserve with the necessary consequence of increasing the cash resources of the banks. But mark what happens to-day. Take the conditions as we actually know them. Trade has been bad for a long time, but signs of improvement have begun to show themselves. Bank advances have increased with the inevitable result that there has been a demand by the public for more currency. We have already seen however that when additional currency goes into circulation, the cash resources of the banks are reduced and their power to lend is diminished. No gold is now bought as formerly by the Bank of England and unless that institution makes additional loans or investments, there is an automatic throttle on the expansion of bank credit and the trade revival must be brought to a standstill.

In present circumstances therefore it is only by wise action on the part of the Bank of England that the restriction on trade revival can be removed. The increase in bank deposits during recent months shows that monetary policy has been directed to creating the additional money necessary to carry a larger volume of production. Although external conditions have shown no amelioration trade has been improving, and had this policy not been adopted the growth of deposits would soon have been arrested for want of a sufficient cash basis and the revival would have been checked. In existing conditions conscious policy is necessary to achieve the results formerly produced by the machinery of our currency control.

In the working of our credit system it would simplify matters if the right of note issue in England were again placed exclusively in the hands of the Bank of England, and for my part I would

gladly see this done. I would go further and extend the monopoly to cover the whole of the United Kingdom, though I know this would raise the question of compensation to the Scottish and Irish banks which now issue their own notes. The amount and conditions of what is called the fiduciary issue would have to be settled, and there might be a difference of opinion as to whether this sum should be fixed or should vary with the amount of gold held in the Issue Department of the Bank of England. A competent Committee, however, could be trusted to come to a right conclusion on this important point. In other respects I see no reason for thinking that the change would present any very serious difficulty. The reasons which existed in 1914 for issuing currency notes instead of extending the Bank of England's right of issue have no longer any weight, and we are not now concerned to determine whether those reasons were good or bad.

MONETARY INFLATION AND PRODUCTIVE CREDITS DISTINGUISHED

Before I conclude this part of my address let me make one further observation. Many people look upon any increase in the amount of money as inflation. They fail to observe the distinction between the different kinds of bank loans which create additional money and denounce them all in one sweeping judgment. When a Government shrinks from raising sufficient revenue by taxation to cover its current expenditure and makes good the deficiency by borrowing from banks, I agree that inflation of this kind deserves unqualified condemnation. It leads to a depreciation of the currency, and I need

not dwell upon the social and commercial evils that must befall a nation in these circumstances. But a bank loan to a manufacturer or merchant, as the result of which more goods are brought into existence and placed upon the market, is on a different footing. In the first case the loan remains outstanding after the proceeds have been spent; in the second, when the goods have been produced and sold, the money received for them is available for repayment of the bank loan, or, to use a common phrase, the loan is self-liquidating. There is a distinct limit however to the justifiable creation even of productive credits. As soon as there is sufficient money to carry the full volume of production of which the nation is capable, no more should be created and the repayment of past loans should balance the extension of new ones. I hesitate to apply the term inflation to additional trade loans of this nature because of the evil associations of the word; but whatever name we give to this expansion of credit, it is indispensable to the proper functioning of our commercial system and is imperatively needed when trade is depressed and unemployment general.

COMMODITY PRICES AND THE GOLD STANDARD

January 27, 1925

DURING the year that has just elapsed Europe has made a remarkable approach to stable conditions of money. After almost unparalleled inflationary excesses a painful struggle is being made towards balanced budgets, national solvency, and a sound monetary basis. In England inflation was never carried to a point at which alarm could be felt for the permanent stability of our currency, but we have not been without our own anxieties. The fear was expressed that the position of London as the financial centre of the world might be endangered by the decline of our currency from gold parity, and the threat was thought to be accentuated by the re-establishment of the German mark. Whatever the real gravity of the danger, however, we may hope now for an early escape from it. The movement in the American exchange has quite recently brought the pound within measurable distance of parity with the dollar, and the full restoration of the pre-war monetary system is generally expected. A reinstatement of the gold standard will be an event of first rate importance, and with your permission I should like to say something on the subject of currency values before I come to my review of the work of the Bank.

CURRENCY VALUES AND GOLD CONTROL

The question of currency values opens a wide field of discussion. It covers all such topics as the

relation between currency and credit, price level, trade and employment. It touches economic problems which have attained a new significance through the growth of joint stock banking and the wide extension of the use of credit in trade. Although the older economists throw but little light on the subject in its recent developments, some of the foremost of our modern teachers, both here and in America, are giving considerable attention to it. They point out that a close connection exists between currency value and the volume of credit, and they discuss the possibility of a more effective use of credit control as a means of modifying fluctuations in the price level, preventing trade crises, and mitigating the extremes of unemployment. But we are still in the stage of inquiry rather than of positive opinion, and there is no formulated body of doctrine generally regarded as orthodox.

The problems of credit are in a sense inherent in the banking system, but their full gravity has only become apparent since the war. Before 1914 there existed a condition which concealed the underlying importance of credit control. The growth of joint stock banking occurred when gold was the basis of all the principal currencies, and the movement of gold regulated almost automatically the issue of currency and the supply of credit. As long as the world's output of gold was not too much above or below current requirements, the central banking institutions in the different countries had normally little difficulty in adjusting their policy to meet the needs of trade. We had, it is true, from time to time financial crises when the automatic machinery broke down, but in our own country at any rate immediate relief was always obtainable. The gold control was suspended by a letter from the Chan-

cellor of the Exchequer authorising the Bank of England to issue notes against securities in excess of the limit imposed by the Bank Charter Act, and confidence was invariably restored.

To-day we live under a new dispensation. In countries that have been forced off the gold standard we have seen the latent possibilities of credit inflation and currency depreciation, which had never in modern experience appeared in their extreme manifestations. Here we are nominally, though not actually, still on the gold standard and, as is so often the case with us, we retain the laws and forms appropriate to conditions which no longer in fact exist. By statute the currency note is convertible into gold on demand, but we all know that we respect the law best when we do not avail ourselves of its provisions. The free issue of paper money was only permitted in times of crisis before the war as an urgent and temporary measure of relief, but to-day currency notes may be put into circulation to an indefinite amount with no other legal backing than a Government debt. I say legal backing because there exists a Treasury Minute which places some restriction upon the issue of notes, but even this Minute would have to be modified or withdrawn in certain readily conceivable conditions.

CHANGES IN PURCHASING POWER

During the ten years that the currency note has been in existence our currency has varied widely in value in relation to its normal gold equivalent, or in other words in relation to the dollar. The sterling exchange has ranged from 3.19 to a point within two per cent of parity. In February, 1923, it

reached 4.72, and in January, 1924, it fell again to 4.21. The pound sterling is now finding its way back to parity and will probably soon stand at its full gold value, not because it will have climbed uphill to meet the dollar but because the dollar under the pressure of the surplus supply of gold will have come down to the level of the pound. In forecasting the immediate future relation of the two currencies many factors have to be taken into account, but ultimately the dominant consideration is the relative movement of prices in the two countries. The index figure of wholesale prices marks changes in the purchasing power of a currency, and the fluctuations of the index figure measure the degree of a currency's stability. While, as we have just seen, the pound has varied considerably in relation to the dollar, sometimes rising, sometimes falling, the mean deviation from the yearly average price level in each of the years 1922, 1923 and 1924 has been less in England than in the United States. In 1922 the mean deviation from the British average was 2.87 and from the American 6.34; in 1923 the figures were 2.37 and 2.99 respectively; and in 1924 they were 2.58 and 2.91. If we take the whole period 1922 to 1924 the respective mean deviations were 4.30 and 4.90. Thus, on the basis of the official index numbers, the price level in England has been more stable during the last three years than in the United States. Measured by the standard of purchasing power the pound, which is not on the gold standard and has no regular restriction on its issue, has maintained stability better than the dollar, which is based on gold. How can this happen?

To answer this question we must turn our attention to a larger subject than currency. We have to consider money, of which currency forms only a

part, and we must begin with a definition of the term.

MEANING OF MONEY

The word money is currently used in many different senses and is associated with a great diversity of ideas. One of two well-known books bearing the title "Money" deals with problems to which not even a reference is made in the other. We read daily that money is cheap or dear, easy or tight. We say of one man that he is worth so much money and of another that he has so much in his business. We think of money as wealth and we habitually speak of it as capital. When we see any marked expenditure by the public we express our wonder where all the money comes from. But if we examine these phrases, so familiar to us all, we shall find that the word money is used with several different meanings. In order to make myself clear I shall define money in relation to my argument as currency in circulation and bank deposits drawable by cheque, but it would be pedantry to allege that other uses of the word are not equally warranted. The money we speak of as cheap or dear, easy or tight, is that part of the whole volume of money which is ordinarily lent by the banks from day to day in the discount market. The term money is used as a measure of value, and not as the thing itself, when we say a man is worth so much or has so much in his business. Money may be properly used in the sense of wealth in the hands of an individual owner, but with the exception of the comparatively small part consisting of gold, silver or copper, which has a commodity value, it is not national wealth. With this reservation money is never capital in itself. According to the way in which it is spent it may be

an agent for the creation or destruction of capital. When it is spent on production, capital is brought into being: when it is spent on consumption, capital is consumed. It is only when we get to the often repeated question, where does all the money come from, that we find the word used in the more restricted meaning of purchasing power, which is the meaning I am attributing to it to-day.

CREATION AND CANCELLATION OF CREDIT

I understand by it all currency in circulation together with bank deposits drawable by cheque, which in the aggregate represent the purchasing power of the public. By far the larger part of our total money consists of bank deposits. The quantity of money is constantly varying, increasing or diminishing from time to time in consequence of the action of the banks, to which I shall refer later. I would at all hazards avoid entering the region of old economic controversy, but I do not think I am stating anything more than will be accepted to-day as a truism when I say that price level is dependent upon the quantity of money, the rate at which it is expended, and the amount of goods and services available for purchase. The quantity of money is thus one of the three prime factors determining the price level, and it follows that whatever controls the quantity of money is to that extent determining its value.

I am afraid the ordinary citizen will not like to be told that the banks or the Bank of England can create or destroy money. We are in the habit of thinking of money as wealth, as indeed it is in the hands of the individual who owns it, wealth in the most liquid form, and we do not like to hear that

some private institution can create it at pleasure. It conjures up a picture of an autocratic and irresponsible body which by some black art of its own contriving can increase or diminish wealth, and presumably make a great deal of profit in the process. But I need hardly say nothing of the sort happens. A bank loan creates a deposit and therefore it creates money. But the deposit is a liability of the bank against which a debt is due to it, and the bank merely stands as an intermediary between the depositor and the borrower. Even the currency itself, except in so far as it is in specie with a commercial value as metal, represents nothing more than a debt due from the Government or from the Bank of England. All that is done by the banks when they create money is to increase the amount of debts due to and from themselves.

The power of the banks to increase or diminish the total volume of money arises from the fact that when a bank makes a loan or discounts a bill or buys a security, a deposit is created; and when the loan is paid off or the bill met or the security sold, the deposit is cancelled. It will be found however on examination that the exercise of this power is in practice strictly limited. In the regular conduct of business banks maintain a definite proportion between their holding of cash and the amount of their deposits. Anyone who cares to study the monthly statements of accounts published by the London Clearing Banks will see that, though there may be temporary variations in the proportion of cash to deposits, there is in each case close conformity to an accepted ratio. Now, although a bank loan increases the aggregate of bank deposits, it does not increase the aggregate of bank cash, and it follows that, so long as each bank adheres to its conven-

tional cash ratio, the power of the banks to create money is limited by their power to obtain additional cash.

CENTRAL BANK CONTROL

The cash held by the banks consists of currency and balances at the Bank of England. We shall not go far astray if we confine our attention to the Bank of England balances and leave currency out of consideration, as the causes which affect the former usually govern the amount of the latter. What is it that sends these balances up and down? For an answer I get back to the old formula, applying it now to the special case of the Bank of England. When the Bank of England makes a loan or discounts a bill or buys a security, or indeed anything, it creates a deposit, which in the ordinary course of trade becomes a deposit of one of the banks with the Bank of England itself. In the same way, when the loan is paid off or the bill met or the security sold, a deposit of some bank with the Bank of England to the amount of the loan, bill or security is cancelled. Thus the action of the Bank of England in lending or calling in, buying or selling, regulates the cash held by the other banks, and inasmuch as this cash is the basis of their loans to the public it follows that the Bank of England ultimately controls the amount of deposits, that is to say, the amount of money.

The capacity to increase or diminish the quantity of money, and thereby to depreciate or enhance its value, is inherent in the ordinary powers of a central bank. If the currency is on the gold standard this power can only be exercised within narrow limits, as the movement of gold will very soon act as a check; but where this standard is not in operation

the full responsibility for maintaining the value of money falls upon the central bank. The obvious guides to the central bank in directing its policy are the movements of the price level and the general state of trade and employment. The price level is not of itself a sufficient indication, as rising prices may be due not to an over-abundance of money but to an under-supply of goods available for purchase, consequent for instance upon a temporary shortage in the world supply of food and raw materials. In such a case a restriction of credit would tend to keep prices down, but it would be at the expense of trade and would lead to increased unemployment. On the other hand falling prices might be due to exceptional abundance of natural products, and in that case an increase of credit would have an inflationary effect. Constant vigilance is needed on the part of the central bank to ensure that the causes of rising or falling prices are correctly diagnosed. Nor does the need for vigilance end here. Many central banks do commercial business for their own customers. They not only meet the needs of the money market in the temporary fluctuations of supply and demand, but they make domestic and foreign loans on their own account quite independently of the market conditions at the moment. Such loans may cause excessive ease of money; their repayment excessive stringency; and unless care is taken to counteract these effects when necessary, by a sale or purchase of securities, trade will be unduly stimulated or unduly depressed.

GOLD AS REGULATOR OF CREDIT

I have dealt with the factors governing our present currency which, so far as it consists of cur-

rency notes, is only limited in its quantity by the control of credit. In the customary phrase of the day it is a "managed" currency, as distinguished from one limited in amount by legal enactment, which usually takes the form of a restriction of issue except against gold. Beyond the fiduciary issue, £18,450,000 before the war and £19,750,000 now, Bank of England notes have to be covered pound for pound by gold. Federal Reserve notes, the principal currency of the United States, must have a minimum cover of 40 per cent in gold; and 30 per cent must be held against the notes now being put into circulation by the Reichsbank. Similarly the new currencies which are being established in other parts of Europe all have some definite relation to gold, conforming in this respect to the principle of limitation of issue almost universal before the war.

The pre-war restriction on the Bank of England note issue operated in practice as a restriction on credit in consequence of the maintenance by the Bank of a fairly constant ratio of reserve to liabilities. Since the introduction of the currency note however there has been no such strict adherence to a customary proportion. In other countries credit control has been provided for in some cases by statutory requirement. Thus the Federal Reserve Banks of the United States are obliged to maintain a minimum cover of 35 per cent in legal tender against the demand deposits held with them by their member banks, and the new Reichsbank Act prescribes a reserve of 40 per cent in defined liquid assets against day to day obligations.

When a currency is on a gold basis its value is fixed in relation to one commodity only, namely gold. We are apt to think that the value of gold is

constant because so many grains are always exchangeable for a sovereign. But how unstable it may be in relation to commodities in general is shown by the recent history of the dollar, the purchasing power of which in 1914 was two-and-a-half times greater than in 1920. It will be found that while through the centuries gold in terms of goods and services has continuously depreciated, it has undergone considerable fluctuations in quite short periods of time. The value of gold, like that of any other commodity, varies with changes in supply, demand, and cost of production. Each of these factors is constantly undergoing slight modifications, but from time to time great events occur which cause a permanent change in their relationship. Of this nature was the discovery of the South African mining field and more recently the reduction in the effective demand for gold arising from the mobilisation during the war of hoarded stores in the belligerent countries.

CHANGES IN THE VALUE OF GOLD

We are all familiar with the conditions under which an ordinary trade commodity falls in value. Sellers offer more than buyers will take at the current price and the price is reduced. But in the case of gold the process is not so simple. Sellers of gold can always obtain the full statutory price for their commodity in a gold standard currency, and there must be a depreciation of the currency, that is to say an upward movement in the price level, before there can be a reduction in the real return for the gold. How this depreciation happens is worth considering. The explanation is much simplified in present circumstances by the fact that there is now

only one completely free gold market, the United States, and we can therefore restrict our view to what occurs in that country.

When gold, whether of native or foreign production, is offered for sale to any of the Federal Reserve Banks, it will be bought at its full rate of so many grains weight for a dollar. As the Federal Reserve Banks are central banking institutions, we remember that the effect of a purchase by any one of them is to create so much additional cash standing to the credit of the member banks. It is hardly necessary to repeat that this cash becomes the basis of additional loans, which create new deposits, or in other words increase the purchasing power of the public. Increased purchasing power unaccompanied by greater production leads to higher prices, and thus we complete the chain of events by which a purchase of gold is connected with a decline in value of the currency.

It is obvious that, if the Reserve Bank sells securities or reduces the bills in its portfolio by an amount equal in value to the gold it buys, the two transactions cancel each other so far as they affect the balances of the member banks. In such case the Reserve Bank has substituted gold in its assets for securities or bills. Nothing more will have happened; there is no change in the deposits of the member banks, no increased purchasing power in the hands of the public, and no decline in value of the dollar. But the Reserve Bank cannot adopt this course except at a sacrifice of profit. It must exchange its profit earning assets for gold which bears no interest, a policy which obviously cannot be carried beyond a certain point. There is a limit to the reduction in profit earning assets, and even a Reserve Bank has to consider the desirability of

defraying expenses out of income and of meeting the demands upon it for dividends.

EFFECT OF GOLD IMPORTS

During a period of fifteen months the effect of an inflow of gold in creating an expansion of credit was successfully counteracted, and it is interesting to note the actual course of events as recorded in the consolidated statement of the twelve Federal Reserve Banks. In April, 1923, twenty-three per cent of the total assets consisted of earning assets, such as bills and securities, sixty per cent consisted of gold, and the remaining seventeen per cent of other non-earning assets. In July, 1924, the corresponding figures showed seventeen per cent earning assets, sixty-six per cent gold and seventeen per cent other non-earning assets. Since then earning assets have increased to twenty-four per cent, which has meant an upward movement in the balances of the member banks and a very considerable addition to the purchasing power of the public. The figures suggest that the Federal Reserve Board felt last summer that they had gone far enough in the policy of sacrificing earning assets in order to neutralise the effect of the incoming gold.

The larger movements in the sterling-dollar exchange have followed the course of the policy of the Federal Reserve Board. That policy has determined rates for money in the United States. When rates of interest were high, floating balances were held in New York and dollars bought in order to lend in that centre. When rates were low, dollars were sold and floating balances in sterling retained in order to lend in London. Thus money rates may exercise a powerful though temporary influence on the ex-

change through the transfer of balances. Ultimately the rate of exchange must approximate to the relation between the price levels in the two countries, but although this is the dominant factor there are other influences to which the exchange is sensitive and which operate upon it before the movements in price level can exercise their full effect. There is moreover such a thing as intelligent anticipation, and those whose business it is to understand the underlying conditions affecting exchange take their view of the market and act accordingly long in advance of any change in commodity prices. The recent rise of sterling in relation to the dollar has gone considerably ahead of changes in price level, but if the rise is maintained we may be sure the price levels will finally conform to the new relation of values between the currencies.

SUPERIORITY OF GOLD STANDARD

Let me summarise in a sentence what I have said so far. I have endeavoured to explain the meaning of a managed currency and the method of maintaining its value by regulating the quantity of money through the control of credit, and I have shown that during the last three years a managed currency has been kept more stable than one based on gold. We can supplement this favourable view by the further observation that considerable economy is effected by its use, as there is no need to incur the cost involved in buying and holding gold as a reserve. But when so much has been said, and it must be granted that it is a great deal, the case for a managed currency must be regarded as closed. On the other hand the gold standard has in existing circumstances great and striking advantages. In the

first place it establishes an international measure of value, common to the whole world and universally accepted. It is automatic in its operation and it relieves the central banks of a responsibility which, notwithstanding our own fortunate experience, might not always be discharged with the knowledge and judgment indispensable for the prosperity of national trade. It is not however wholly inelastic. There is still scope under it for an exercise of discretion by the central institution, as we have seen in the recent action of the Federal Reserve Board. In our own country the effect of a movement of gold can to a considerable extent be counteracted by the Bank of England raising or lowering the ratio of reserve to liabilities.

But in the present state of knowledge and feeling one of the greatest advantages of the gold standard is its moral effect. A nation will think better of itself, will almost regard itself as more honest, if its currency is convertible into gold. The fear of being forced off the gold standard acts as a salutary check on the extravagance of Governments who might be willing to face a mere fluctuation in exchange but would not dare to suspend specie payment. It is a real advantage to a nation to have a currency founded upon a value which is universally recognised; it inspires confidence and facilitates international transactions. Even if the gold standard were not preferable for other reasons its universality would be decisive in its favour. The argument may, it is true, be founded on psychological and not on economic grounds, but it is none the less powerful, as we have not yet reached the stage where economic considerations alone guide us in judging the desirability of any particular method or system. So long as nine people out of ten in every country

think the gold standard the best, it is the best. If in the future there were an immense increase or decrease in the output of gold and consequently a startling rise or fall in prices, re-consideration of the subject might be forced upon public attention, but at present there is no single nation, so far as I know, which is now off the gold standard, that does not regard the return to it as the most desirable of all financial measures.

THE TRANSITION TO GOLD

January 26, 1926

OUR return to the gold standard is the outstanding financial event of the year. Its profound importance to our currency and credit system is acknowledged ; yet the final step was taken without noticeable disturbance, and our ability to recover and hold a free gold market has been firmly established. Precautionary arrangements were made in order to meet the possibility of an excessive demand upon our stock of gold, but notwithstanding some loss no occasion has arisen for making use of the facilities obtained in the United States. On what we may term its exchange aspect the operation was entirely successful; and our financial authorities may be congratulated upon their achievement, in which the sympathetic attitude of the American bankers was a material factor.

TRADE ON A RISING EXCHANGE

On the other hand we must recognise that the transition to gold seriously impaired our export trade. Financial measures were adopted which raised the exchange value of sterling but had no immediate and proportionate effect in lowering our internal prices. Our situation indeed was the reverse of that which exists in countries with depreciating currencies. In France, for example, prices are low for foreign buyers because of the heavy fall in the franc, and French traders consequently enjoy

a premium on exports. In our case, on the other hand, foreigners found the price of sterling too high, measured in terms of their own currency, to permit of their buying British goods, and British exporters were therefore at a serious disadvantage in world markets. For evidence of this effect on our foreign commerce we have only to look at the official returns, which for several months showed an exceptionally large unfavourable balance. But this impediment to our export trade is fast disappearing. Since last spring the price level in England relative to other countries has fallen considerably, and the over-valuation of the pound sterling has ceased to be an important factor in our foreign trade.

The immediate question of interest to this country is the effect of the return to gold upon British trade and employment. It is a question of the greatest importance to the whole community and is worthy of the closest consideration. I am reluctant to traverse old ground, and particularly unwilling to revive bygone topics which to-day have lost all actuality. But we cannot measure the effect of the change without first examining the influence of financial policy during those years when our monetary system worked independently of gold, and I must therefore refer, though as briefly as I can, to our trade and financial history in the last five years.

The story of our trade in recent years is not an inspiring one. Since 1920 business has been continuously depressed. The depression has varied in intensity, but its severity throughout the whole period can be judged by comparing the statistics of unemployment with those of earlier years. An exact comparison with pre-war figures is impossible, as the live register, which gives the most complete record of unemployed persons, is only of recent

creation. Percentage figures, however, of unemployed members of trade unions paying benefit and furnishing returns are available over a long period, and if we assume that the total of unemployment is proportionate to the unemployment among the members of those unions we get a fair basis for comparative purposes. I have adopted this method of relating recent figures to those of the earlier years of the present century.

COURSE OF UNEMPLOYMENT

During the first fifteen years unemployment was greatest in 1908, a time of exceptional crisis; but even in this year of maximum figures the average number may be taken as less than 800,000, and the peak probably never rose to a million. The conditions in 1909 were only a little better; but in no other of the remaining thirteen years did the figures approach anything like this magnitude. After 1909 trade gradually improved, and in the four years 1911 to 1914 the average of unemployment probably lay between 300,000 and 400,000. Now how do these figures compare with the actual records of the live register in post-war years? Statistics strictly comparable with those now published are available only from the beginning of 1921, but it may be inferred from earlier returns that in July 1920 the unemployed numbered less than 500,000. Six months later, at the end of January 1921, the unemployed exceeded a million, and by June of that year the total had risen to nearly 2,200,000, a figure in part due to the prolonged coal strike. This was the highest recorded point, from which for three years there was a slow decline with inconsiderable fluctuations. By June 1924 the number had fallen to little more than a million. During the last eighteen

months the figures first rose to 1,400,000 and then fell again and stood at the end of 1925 at 1,200,000.

Such is the actual record of the last five years. The excessive amount of unemployment is generally attributed to one or more of the following causes: first, that much of our plant in the heavy industries is out of date and our organisation defective; secondly, that there is a superabundance in the world's supply of those commodities which we usually export; thirdly, that wage costs are too high, more particularly in some of the sheltered industries; next, that the burden of taxation, both national and local, throws a charge upon industry which handicaps us in competition for foreign markets; and lastly, that the unsettlement of Europe has gravely restricted the purchasing power of many of our customers.

Undoubtedly these factors, to the extent that they exist, are serious obstructions to trade, and no effort should be spared to remove them. But it will be observed that all of them have been operative throughout the period since the war, and that neither individually nor collectively could they afford an explanation of the great fluctuations in unemployment we have recently experienced. They were in operation in 1920, when our figures of unemployment stood at less than 500,000; they were in operation, even allowing for exceptional circumstances, when those figures rose to 2,200,000; and, with some amelioration it is true, they were still in operation during the three years when unemployment was being steadily reduced by more than one-half. We may be assured that the whole level of national prosperity can be raised by proper attention to our industrial and economic defects, but we must seek some other reason for the remark-

able fluctuations in employment during the last five years.

INFLUENCE OF MONETARY POLICY .

Is there then any other contributory cause of this long-continued trade depression? And what is the explanation of the wide variations in employment in comparatively short periods of time? Is there indeed any explanation at all, or is it a haphazard affair which nobody can understand and which we need not trouble to investigate? There is in truth no mystery about the matter, and in dealing with any country but our own we should not have the slightest difficulty in forming a right judgment. When we ourselves are not immediately concerned we recognise at once the influence upon trade of monetary conditions and policy. If we see, for instance, that there has been practically no unemployment in France since the war, we find unhesitatingly a partial explanation of the phenomenon in the inflation of credit and currency. No one doubts that monetary inflation must ultimately prove disastrous; but our firm conviction of its vicious effects in the long run does not prevent us from recognising that while it lasts it stimulates trade, and particularly the export trade. Or if, to take an opposite example, we look at Germany we find that, notwithstanding a comparatively low level of wages and a tolerably high degree of efficiency of plant and organisation, trade is depressed and unemployment is rife. Here again we recognise the cause at once in the internal monetary conditions following upon the collapse of the mark. There is not enough currency or bank credit in Germany to carry anything like the volume of trade she is capable of conducting. The country has not yet recovered from the

severe deflation necessarily forced upon her after the orgy of inflation which destroyed her old currency, and the basis of credit is still far too restricted for commercial needs.

Thus in France and Germany we can estimate quite dispassionately the influence of monetary and credit conditions. It is only when we turn our view from foreign countries and come to consider our own case that we meet a certain reluctance to discuss the effect of monetary policy upon trade and employment. That such influence exists is not categorically denied, but the subject is too often treated as one better left alone lest we be led on to unorthodox conclusions. It is not, however, an illegitimate curiosity which seeks to understand the principles that guide the control of credit; and if we are to form a rational opinion of the probable effect on our trade of the return to gold we must take cognisance of the meaning of the change. We cannot escape from a reference to former monetary policy as a preliminary to discussing the new conditions resulting from the restoration of the gold standard.

DEFLATION AND THE VOLUME OF TRADE

Since 1920 a policy of deflation has been pursued with varying degrees of intensity. Let us see what this means in its effect upon trade. At any given moment the total volume of trade in the country is conducted on the basis of the credit and currency existing at the time. If prices were higher a larger volume of credit would be required for the same amount of trade, assuming no compensating change in the velocity of circulation. Similarly, if prices were lower a smaller volume of credit would suffice. The theory of the deflationist is that by a restriction of credit and currency the price level can be forced

down so that the same volume of trade measured in commodities can still be carried on, but at lower prices. The simplicity of the theory is very attractive. It has the satisfactory quality of an equation and is laid down as a self-evident truth. The misfortune is that the theory is not as exact as it seems and that when put into operation it does not produce the expected results. Let us see what are the effects of a restriction of credit and currency. It may depress prices; it may reduce the rate at which money circulates; it may diminish production. The degree to which any or all of these consequences may follow varies according to the conditions of trade at the time the restriction of credit occurs; but nothing is so certain as that falling prices or a lower velocity of circulation will have an adverse effect on the volume of production. It is at this point that the confirmed deflationist gets into difficulties. A decline in production increases the cost of manufacture and tends to arrest the fall in prices. In manufacture there is no law of diminishing returns. On the contrary, manufactured goods are produced cheapest when plant is running at 100 per cent of capacity, and, if the total of production is reduced, the cost of manufacture of what remains is immediately increased.

After an outburst of speculation based upon monetary inflation prices can be forced down again by a severe restriction of credit to the level, or even below the level, at which they stood before the speculative outburst began. Heavy trade losses and considerable unemployment will ensue, but these are the temporary though inevitable accompaniments of a healthy reaction. When the effort to deflate is suspended trade will soon begin to revive. If the deflation be long-continued, however, its

effect will show itself particularly in a lower scale of production. A further decline of the price level will then be arrested by the higher cost of manufacture, and the exceptional degree of unemployment will persist. This has been our experience during the last five years, when our monetary policy was governed by the declared determination to return to the gold standard at the earliest practicable moment. Immediate trade requirements and the exigencies of the dollar exchange were in direct conflict. It was impossible without an expansion of credit to carry a volume of trade sufficient to absorb the unemployed and provide for the natural growth of the population unless prices could be reduced; but the effort to bring down prices to the requisite level continuously failed of its purpose. It was frustrated by the natural opposition to a reduction in wages and by the high cost of production on a diminished output; it resulted in long-continued trade depression and excessive unemployment. That our endeavour after five years of effort has at length been crowned with success is a matter for sincere congratulation, but candour compels us to admit that the rise in the American price level has been the most powerful factor in our achievement. It is idle now to discuss whether the object in view was worth the price we have had to pay for it. Let us be content that the goal has been reached; and let us rest in the hope, for which there is good foundation, that we may reap the reward in the future.

GOLD THE CONTROLLER OF CREDIT

I have done with the past five years and the influence on our trade of the monetary policy then pursued. I turn now to the future and am at once confronted with the fact that monetary policy has

no longer the same free play. A new element has appeared. The movement of gold is once again playing a dominating part, and though its influence may still to some extent be mitigated by policy, in the long run the purchase or sale of gold by the Bank of England must be the controlling factor in the expansion or limitation of credit. As I have already mentioned, during the eight or nine months since the free export of gold has been allowed, we have worked under the temporary disability of an over-valued currency; but this condition is coming to an end. We have now reached a stage when we can form an estimate of the future based on the normal working of the gold standard.

If we accept the proposition that the expansion or restriction of credit stimulates or depresses production, it follows that the movement of gold into or out of the country, which is now the principal factor in the supply of credit, must have a powerful effect on our trade. In forming an opinion upon the effect of the return to the gold standard the important question for us to consider is whether it is probable that we shall have to maintain high money rates and continue artificially to restrict credit in order to conserve our existing stock of gold, or whether the circumstances are such that we may reasonably expect gold to flow into the Bank of England without any effort on our part to attract it. The answer to this question must clearly depend upon whether the world's annual output is in excess of the normal demand.

DEMAND FOR GOLD

The expression "normal demand" in the sense I am using it needs some explanation. Gold may be bought by two kinds of buyers. It may be bought

because it is wanted; it may be bought because the buyer has it thrust upon him. I describe as normal the demand for gold by those who want it. They may need it for purposes of currency or hoarding, or as material to be used in manufacture and art. The annual output of gold, however, may be largely in excess of these requirements, and in that case another kind of buyer can always be found to take the surplus. The central banks in countries with a free gold market are obliged to take all gold offered to them at a fixed price in their own currency. Until last year, when we assumed this liability, the only country with a free gold market since the war was the United States. The Federal Reserve Banks there were bound to take all gold tendered to them, and having accumulated large stocks far beyond their internal requirements are to-day much more willing sellers than buyers. What will happen now in London remains to be seen; but in endeavouring to form an opinion as to the probable movement of gold in the future we cannot do better than take the experience of recent years as our guide.

The normal demand for gold is subject to considerable fluctuations. India is a very uncertain factor as a buyer. Germany has been and may be again in the market for very considerable amounts. Further, such fortuitous incidents as the high price of rubber create large temporary demands. As a result of such fluctuations the surplus bought by the United States has varied widely. To get a true estimate of the world's demands it is necessary to take a view over a fairly extended period, and I have therefore taken out the American import and export figures for the last four years. These show a balance of gold imports into the United States of over £ 130 millions, and we may conclude that over

this period the average annual surplus above normal demand, after allowing for American commercial consumption, has certainly exceeded £25 millions. It is probable that the greater financial stability in Europe following the restoration of genuine peace conditions may increase the normal demand for gold and that the average annual surplus will not be as large in future as the figure I have mentioned. But in view of the increasing output of the mines, the existing surplus in America, and possible economies in the use of gold by central banks, I think it reasonable to anticipate that for some time there will be an excess supply which will have to be absorbed by the United States and England.*

CREDIT EXPANSION AND TRADE REVIVAL

When we read in our morning paper that the Bank of England has bought gold, we have a comfortable sense of solid security. Such a purchase, however, has much wider results than the strengthening of the Bank's reserve, however advantageous that may be. The Bank pays for gold by a draft on itself, and the cost will sooner or later appear in its accounts as a deposit to the credit of one or more of the Clearing Banks. The Clearing Banks will have larger balances at the Bank of England. They will have more cash and will be able to lend more freely. Additional loans by the banks create more purchasing power in the hands of the public and a stimulus will be given to trade.

It follows from this that if there is a surplus of gold in excess of the normal demand, it will stimu-

*The recommendations of the Genoa Conference for economy in the use of gold have to a large extent been disregarded, and in consequence there has been a much greater demand for gold by the central banking authorities than was anticipated at this time.—R. McK.

late trade in the countries which have a free gold market and are bound to absorb it. A remarkable example of this proposition has been furnished in recent years by the United States. While trade has been depressed here, it has with brief exceptions been extremely active in that country. They went through forced and severe deflation in 1921 in order to counteract the wild inflation which had overrun the world; and now and again since that time the financial authorities, alarmed lest the market was moving towards inflationary speculation, have temporarily adopted measures to counteract the effect of the purchase of gold. But, taking the period through, the excess import of gold has been allowed in some degree to become the basis of additional credit, with the result that in the last four years the demand deposits of the reporting member banks of the Federal Reserve system have increased by 30 per cent. *Prima facie* this large increase in public purchasing power might be thought indicative of inflation. But if we look at the other factors in the American situation we find no serious ground for alarm. During the same period there has been an increase of 14 per cent in employment in manufacturing industries, and an increase of nearly 40 per cent in production in basic industries. In short, the United States as a whole are enjoying very considerable trade prosperity, and the best authorities tell us that their prosperity is on a sound basis.

SAFEGUARDS AGAINST INFLATION

If then I am right in thinking that the present supply of gold is in excess of the normal demand, part of the surplus will become the basis of additional credit in England and will stimulate trade and production here as it has done hitherto in

America. If the surplus is larger than is required for the needs of a healthy expansion, inflation will ensue unless steps are taken by the Bank of England to prevent it. Here again we have an example in the United States. As I have already mentioned, the Federal Reserve Banks have thought it necessary to guard against inflation more than once in the last four years. The principal measure adopted to counteract the effect of the forced purchase of gold was quite simple. It must be remembered that just as a purchase by a central bank, be it of gold or anything else, increases bank credit, so a sale reduces it. The Federal Reserve Banks allowed their bills to run off, and later sold investments, as fast as the gold was paid in, and thus stopped the growth of credit.

It will be observed that this process was very expensive for the Reserve Banks. Bills and investments are earning assets; gold is not. A continued replacement of bills by gold would have ended in depriving the Reserve Banks of all revenue, and they did in fact reach a point in 1924 when they were barely covering their expenses. Since then their earning assets have been largely increased and the lean period has come to an end. It is not impossible that the Bank of England might have a similar experience, but to the extent that the incoming gold was of American origin the movement could be easily arrested by action on the part of the British Treasury. The exchange could be prevented from reaching gold import point by the purchase of dollars, to be utilised at the Treasury's option either in advance payment of instalments of the American debt or in the accumulation of United States Government Bonds. This operation would involve little or no loss of interest to the British

taxpayer and would have the added advantage of safeguarding the position of the Bank of England. Any proposal to apply surplus gold to permanent use in this country, such as additional backing to currency notes, would be an unnecessary and costly proceeding, and should I think be rejected, having regard to the heavy burden of existing taxation.

It is not unusual for writers on the present day condition of England to discover signs that the productive capacity of our country in competition with other nations has passed its zenith. They see in our figures of long continued unemployment indications that we are no longer able to hold our former position and believe that the tendency in future will be towards a progressive decline in our trade. These opinions are often expressed by persons who, though candid in criticism, are friendly in feeling. They deplore what they regard as the passing of a great people. I confess, however, that I do not share their opinion. Through all these years of trade depression we have still been the greatest exporters of manufactured goods in the world. Our trade has had to struggle against adverse conditions, but its vitality has not yet been seriously impaired. If these adverse conditions were all of a permanent nature, if they sprang from causes which marked a definite deterioration in our mental or physical capacity, there might be some ground for anxiety about the future. But I do not think this is the case. There is always room for improvement, and I believe the years of depression have been a testing time for us and a warning to put our house in order. The exceptional depression has been largely due to temporary financial conditions, and for the reasons I have given, I have strong hopes that these are now coming to an end.

AMERICAN PROSPERITY AND BRITISH DEPRESSION

THE NEED FOR A MONETARY INQUIRY

January 28, 1927

The task I am setting myself to-day is by no means an easy one. I propose if I can to give some answer, partial though it may be, to the question: Why it is that for the past six years we have suffered from trade depression and unemployment of almost unparalleled severity, while America has enjoyed great and increasing prosperity? No apology is needed for discussing on the present occasion what is primarily a trade problem. Banking prosperity is vitally interwoven with the welfare of the community as a whole. We are bound to be concerned with all the causes which make for good or bad trade, and it must be our first endeavour to discover what these causes are and if possible to remedy any defects. In the present case I cannot escape the conclusion that the monetary element has been of deep importance, and though I do not minimise the effect of other influences, it is to this in particular that I wish to direct your attention.

Seven years ago we were living in a riot of public and private expenditure. But it was not in England alone that inflation was rampant. The whole world was more or less affected, including even the United States, which, except for some time towards the close of the war,* had never departed from the basic principles of a full gold standard. In that

*Gold exports were prohibited, except under licence, from Sept. 7, 1917 to June 30, 1919.

country as here an inevitable period of business liquidation followed the post-war boom, and down to the late summer of 1921 conditions in the two countries were very similar. From that time onwards, however, their paths have been far apart. With occasional and comparatively brief intervals, the United States, judged by the tests of production, employment, wages and profits, has enjoyed exceptional prosperity. In England, on the other hand, a large portion of our population has been continuously unemployed, and the pre-war standard of production, although there have been noticeable fluctuations, has at no time been recovered.

The similarity of trade conditions in England and America in the first three years after the armistice, contrasted with the subsequent dissimilarity, points to the occurrence of some vital change in 1921 capable of producing or at any rate markedly contributing to these different results. Monetary conditions exercise such an all-pervading influence that in investigating a matter of this kind we are forced to turn our attention to them; and as we find that from 1921 onwards there was a wide divergence between English and American monetary policy, we have in this fact at least a partial explanation of the phenomenon.

MONEY AND THE VOLUME OF TRADE

The importance of the place occupied by money in modern production and trade is well understood. Bank credit facilitates every branch of production. Goods are raised from the soil, manufactured, carried and marketed with the assistance of credit at every stage. To the borrower the price paid for accommodation is not so vital, except in extreme

cases, as the adequacy of the supply. An increase of credit gives rise to a greater demand for commodities, stimulates trade and brings more people into employment. It may do even more than this. As a larger volume of business enables overhead charges to be more widely spread, an addition to the total of money may reduce the cost of manufacture. I say "may" and not "must" because there is another side to the picture. The immediate tendency of an increase in the quantity of money is to harden prices, and if the ensuing greater production does not fully counterbalance the larger volume of money, prices will remain at the higher level and the cost of production may on balance be increased. Should the growth of production keep pace with the increase in the quantity of money, thus preventing anything more than a transitory rise in the price level, then there is no inflation. If there is no such correspondence in movement, then the expansion of money constitutes inflation, and should the process be continued, the value of our currency both at home and abroad will decline.

By contrast, a reduction in the quantity of money has a restrictive influence on trade. With a reduced total of money available for spending there is a diminished demand for commodities, prices at once tend downwards, and shopkeepers, merchants and manufacturers curtail their orders. The result is depression and unemployment. Trade will right itself if the cost of production can be lowered, a movement which involves a fall in wage rates proportionate to the drop in the price level. But we know from experience that this does not readily occur. It is a long and difficult process to adjust labour costs to a decline in prices, and though hard economic necessity may ultimately force them

down in industries subject to foreign competition, it is almost impossible to obtain an equal reduction in what are known as the sheltered trades. A shrinkage in the volume of money consequently brings with it difficulties of readjustment which are not easily overcome and which in addition are the cause of grave unrest.

When now we compare English and American conditions we find that it is precisely in the movements of credit that the basic dissimilarity shows itself. Since the autumn of 1921 there has been a great expansion in bank deposits in the United States. Using the latest available figures for purposes of comparison, it will be found that the average total deposits of the reporting member banks of the Federal Reserve system rose from £2,860 millions for the twelve months ending November 1922 to £3,751 millions for 1926, an addition of no less than £891 millions.* Taking similar average figures for this country we find that over the same period the total deposits of the ten London clearing banks fell from £1,783 millions to £1,661 millions, a decline of £122 millions.† Thus while

* The full figures for the period are as follows :—

	Number of Banks*	Total Deposits \$ millions
Average for 12 months to November 1922 ..	784	14,298
" " " 1923 ..	767	15,329
" " " 1924 ..	741	16,417
" " " 1925 ..	722	18,181
" " " 1926 ..	691	18,755

* At end of period

—*Weekly Statements of Reporting Member Banks*

† The full figures for the period are as follows :—

	Deposits £ millions
Average for 12 months to November 1922 ..	1,783
" " " 1923 ..	1,675
" " " 1924 ..	1,673
" " " 1925 ..	1,663
" " " 1926 ..	1,661

—*Monthly Average Statements of London Clearing Banks*

there was an increase of £891 millions in the United States, there was a decrease of £122 millions in this country.

It is clear that a growing population and expanding production call for a larger volume of bank credit; and it must be equally clear that if the expansion of credit is not haphazard, but is capable of definite control and properly within the domain of policy, it is wise to ensure that the additional accommodation will be forthcoming. Those who think that any increase in the volume of money must be stigmatised as inflation will doubtless be alarmed by this growth of credit in the United States; but if the supply of new money does no more than keep pace with the increase in production, there is in fact no inflation whatever. An enlargement of credit, which in one set of conditions may be inflation, in another is an indispensable accompaniment of trade expansions. We have to distinguish clearly between inflationary and non-inflationary growth in the volume of credit; and to do so we must start with the question of how additional money comes into being.

DETERMINATION OF THE QUANTITY OF MONEY

To clear the ground we must begin by giving a meaning to the word money. I regard money as including all forms of currency, together with bank deposits readily withdrawable by cheque. It constitutes purchasing power and at any one moment represents what is available to the public, the Government and the banks for spending. Apart from the action of a bank, the public in practice are powerless to increase or diminish permanently the total of money except by destroying their notes

or sending them out of the country. They may buy or sell, borrow or lend, spend or save; the quantity of money in the country will be unchanged. Should they draw out notes from their banks they do no more than convert a bank balance into currency in circulation. Should they pay in notes to the credit of their accounts they increase bank deposits to the exact amount by which currency in circulation is diminished. By spending or saving they may make money circulate faster or slower; only by a change of habit which led them to carry more or less currency in their pockets could they of their own initiative affect the total of money. Not even by dealing in foreign exchange nor by borrowing or lending abroad is it possible for the public to alter the volume of money, although by so doing they may raise or depress the external value of sterling. It is a common practice to talk of foreign money coming here or English money going abroad, but the language, though convenient, is inaccurate, for the implication that the total amount of money in the country is affected by these operations is false. It is not the money that moves, but the title to the money. The ownership of sterling may pass into foreign hands or we may acquire the ownership of foreign money, but, with the unimportant exception already named of notes being sent abroad, the money itself is rooted in the country of its origin.

The Government, independently of action by the Bank of England, are no less passive than the public as regards the volume of money. It is conceivable indeed that they might issue currency notes for the purpose of putting themselves in funds, in which case the total of money would be increased. But in fact this is not done. Notes are issued only when required as currency, and when

after use they come back through the banks to the Bank of England they are immediately cancelled. All currency, whether notes or coin, comes into circulation only when bought by the public, whose purchasing power as expressed in bank deposits is correspondingly reduced.

It appears then that fluctuations in the quantity of money cannot under present conditions be accounted for by anything done independently either by the public or the Government. We must therefore look to action by the banks, and particularly the Bank of England as the central institution, for the cause of these movements. Here we are at once forced back upon the familiar proposition that every new loan or purchase by a bank creates an equivalent deposit, thus increasing the quantity of money, while every repayment to or sale by a bank destroys a deposit and correspondingly diminishes the quantity of money. Since whatever the banks pay out comes back to one or other of them as a new deposit, the layman might naturally expect that they would not weary in the profitable business of making loans and buying bills and investments. In practice however strict limits are set to their activities in this direction. Lending and buying, with the exception of a purchase of gold, increase deposits but add nothing to the total of cash reserves. All banks insist on maintaining a fairly regular proportion between their cash and deposits, and unless cash is increased a material rise in deposits will not be permitted. The proportion may not be the same in different banks, and one bank may gain while another loses deposits, but it is true to say that without an alteration in the total of bank cash, deposits as a whole will vary but little. If then we are to discover the real causes

of fluctuation in the quantity of money we must look for them in whatever produces variation in the total of bank cash.

VARIATION IN BANK CASH

It may not be out of place to recall that in the language of the clearing banks cash means currency together with balances at the Bank of England. Banks hold coin and notes in their tills to meet their customers' immediate requirements, additional notes in their vaults as a currency reserve, and balances at the Bank of England which are drawn upon according to the needs of their business. These together constitute bank cash, and as the amount rises or falls so the banks buy or sell, lend or don't lend, in order to maintain their customary proportions between bank cash and deposits.

The total of bank cash may vary from three causes. First, the public may on balance pay into the banks some of the currency previously in circulation, or on the other hand may draw off additional currency. Secondly, the banks may in theory buy gold; but as such transactions do not at present take place on any substantial scale, they call for no further mention. Finally, there may be fluctuations in the total of bank balances at the Bank of England quite apart from either of the preceding causes.

As regards the first possibility, variations in the quantity of currency in circulation, the short-term fluctuations may be fairly accurately foreseen and depend upon regularly recurrent needs. Wages, which create a large demand for currency, are almost always paid on Friday, with the result that the banks usually hold less cash at the close of that

day's business than on any other day of the week. But the currency passes through the hands of shopkeepers, rent collectors and others back to the banks, and comparing one week with another the total of bank cash does not vary much on this account. Again, at Christmas, Easter, Whitsuntide and August Bank holiday the public call for more currency, and the result is a temporary reduction in bank cash. These are events of regular occurrence and short duration. The conventional proportion of cash to deposits is slightly lowered in the first stage of such demands for additional currency, but the decline does not usually give rise to any protective measures by the banks in the way of restricting loans or selling securities in order to restore their normal cash proportions. As regards long-term variations, these are only gradual and arise from changes in national habit, which are necessarily slow in making themselves felt and which therefore do not demand consideration at this point.

The third and far the most important cause of fluctuation in the total of bank cash takes the form of variations in bank balances at the Bank of England which may be attributed to causes other than public demands for currency. Herein lies the kernel of the matter. It is not generally recognised that the principal cause of any but the most transient movements in these balances is not something done by the banks, but something done by the Bank of England. If the Bank of England makes a loan, or discounts bills, or buys gold or securities, the amount paid becomes bank cash. Conversely, when a loan by the Bank of England is repaid, or discounted bills are met at maturity, or gold or securities are sold, bank cash is correspondingly dimin-

ished. The only other possible cause of fluctuation is the payment of currency into or out of the Bank of England according as the public require less or more for circulation, and, as I have already shown, such movements are in the main purely temporary and of no very serious extent.

BANK OF ENGLAND CONTROL OF MONEY SUPPLIES

We have now reached two vital conclusions: first, that variations in the quantity of money are due to variations in the total of bank cash; and second, that the total of bank cash is determined, except to an immaterial extent, solely by the action of the Bank of England. Indirectly therefore the Bank of England is in practice the controller of the volume of money. Thus we see that the gold standard is by no means the "automatic" mechanism it is commonly alleged to be, since the Bank, merely by buying or selling, lending or calling in loans, can within limits prompt an expansion or contraction of credit regardless of movements of gold. This power, however, cannot be exercised without restraint. The Bank is itself governed by the terms of its constitution, and even such freedom for the exercise of policy as it might possess is in considerable measure limited by the rigidity of its system. This is the point on which I wish to lay emphasis to-day. The Bank has justly earned a world-wide reputation for integrity and the large spirit in which it conducts its business, and we are apt to ascribe this reputation to the merits of the institution itself. The honour, however, is not due to the system, but to the skill with which it has been worked. That this is so will appear from an examination of some of the Bank's functions.

The Bank of England is required to buy at a fixed price all gold tendered to it and to sell gold on request at a slightly higher price. It discounts approved bills for its customers at rates determined by reference to the Bank rate, which may be regarded as the minimum charge for discounting. In addition it makes temporary loans to the Government in anticipation of revenue. These particular operations are conducted as a matter of course, without regard to any pre-conceived policy. But open market dealings in bills or purchases or sales of securities or the making of loans to customers other than the Government are matters in the discretion of the Bank, and action upon these lines may depend upon the view taken as to the desirability of increasing or diminishing trade credit. This is the sphere of policy, the scope of which in determining the quantity of money is still sufficiently wide to give it great importance, even though the main operations of the Bank are conducted in accordance with well-established rules.

It is not surprising therefore, in view of the conditions of our trade in recent years, that Bank of England policy has for some time been a matter of controversy. All parties acknowledge the principle that the governing factor in the exercise of monetary powers should be the needs of healthy and legitimate trade, but they do not agree as to the practicability or the method of securing this result. Indeed, neither the critics nor the defenders of the present monetary system are all in agreement among themselves. If we were to label one party deflationist and the other inflationist we should do great injustice to many of the more sober disputants on both sides. It is true that some people seek by a slow but steady reduction in the quantity

of money, regardless of other consequences, to bring us back to what they describe as pre-war normality, though they never explain why the conditions of 1913 should be regarded as normal any more than those of 1927 or 1827 or any other date. It is no less true that another group of people firmly believe in the possibility of an indefinite extension of production and trade on a solid and prosperous basis by means of nothing more than a continuous increase in the quantity of money. These two sets of men are rightly called deflationists and inflationists, and I have not yet made up my mind which of the two if they had their way would do more injury to our national welfare.

INFLATION AND DEFLATION

The arguments against both inflation and deflation are sufficiently clear to make it evident that our proper course is to have nothing to do with either. But it is not always easy to know when we are in fact inflating or deflating. Let me illustrate what I mean by turning to the United States, where, as I have mentioned already, the volume of money has expanded enormously in recent years.* On the face of it this might appear to be a case of inflation, but if we examine statistics of production over the same period we shall see that a very large

* For statistics of bank deposits see p. 121. Figures relating to currency in circulation are as follows :—

				\$ millions
Average for 12 months to November 1922				4,433
"	"	"	1923	4,699
"	"	"	1924	4,803
"	"	"	1925	4,815
"	"	"	1926	4,872

—*Monthly Circulation Statements issued by U.S. Treasury*

increase has taken place in industrial output. As a result there has been no rise in prices and no inflation.* I will not trouble you with details of the figures, either of production or prices, for these are readily available in official publications. Such are the facts, and Americans rightly claim that the additional money has been needed to carry the greater volume of trade. The creation of additional money was indeed an essential condition of trade expansion, and if the Federal Reserve Board had allowed themselves to discover an inflationary taint in the growth of bank deposits, as the deflationists in England would certainly have done, the trade prosperity which has grown up and flourished in the United States would have been strangled at its birth.

Here we have an example of very considerable expansion of credit without inflation. Now let me take another case, drawn from our own experience, in which without any actual restriction of credit the basic circumstances are such as to make our condition one of continuous deflation.

For close upon seven years we have had an army of unemployed in this country, never less than a million, at one time over two millions, and at

* Some of the relevant index numbers are as follows:—

				Production in Basic Industries (1919 = 100)		Wholesale Prices* (1913 = 100)
Average for 12 months to November 1922				95	..	148
"	"	"	1923	120	..	155
"	"	"	1924	107	..	149
"	"	"	1925	116	..	159
"	"	"	1926	120	..	152

*Compiled by Bureau of Labour Statistics

—Federal Reserve Bulletin

present nearly a million and a half.* Every year the normal growth of population adds roughly two hundred thousand to the number of our people capable of productive labour of one kind or another. In order fully to occupy our people an immediate increase of banking credit, that is of money, is indispensable for carrying the larger volume of commodities which the unemployed and the new recruits to labour will produce. To check the growth of credit when the population is steadily increasing and vast numbers of men and women are out of employment is obviously to cut off all hope of trade expansion unless prices are continuously lowered. But we all know what falling prices mean to trade in these conditions. They spell stagnation, from which the sole means of recovery is a reduction in wages. It may be true that with falling prices the reduction would be in nominal more than in real wages, but I think our experience has taught us sufficiently the difficulty of effecting any reduction at all, and that what actually ensues when the volume of money decreases is long-continued trade depression. Stationary or even insufficiently expanding money supplies, with a growing population struggling to find employment, represent in truth a condition of deflation.

* Applicants for employment registered at employment exchanges in Great Britain only, according to last weekly return in each half-year:—
(000 omitted)

1921 : June ..	2,438*	1924 : June ..	1,009
December ..	1,885	December ..	1,274
1922 : June ..	1,468	1925 : June ..	1,304
December ..	1,382	December ..	1,102
1923 : June ..	1,223	1926 : June ..	1,640*
December ..	1,286	December ..	1,351

*Coal stoppage in progress

The corresponding figure for January 10, 1927 was 1,432,000.

—181b *Abstract of Labour Statistics of the U.K. and Returns issued by Ministry of Labour*

MONETARY POLICY AND TRADE CONDITIONS

In order to avoid misunderstanding it is necessary for me to remind you that my present endeavour is to describe how the machinery of credit works and its influence upon trade. I am not discussing the merits of Bank of England policy. Deflation, even rigorous deflation, was a harsh necessity in 1920 and 1921. Its continuance in varying degrees of intensity through the following three years, after the United States had abandoned the process, was based on the desire to effect an early return to the gold standard. It will long remain a matter of opinion whether the rise in sterling was unduly forced and whether the final result could not have been attained with a less stifling influence on British production. But to-day such questions as these have only historic significance. We have been working on the gold standard for nearly two years, and except for the rigidity of the Bank of England system, there is now nothing to prevent the same response being given to growing trade demands in this country as has been given in America.

It may be argued that if the Bank of England were to buy or lend more freely, thus increasing bank cash and enabling the banks to grant additional accommodation to industry, we should have no absolute assurance that this step would as a fact be followed by greater production. If it were not, then the expansion would be in the nature of pure inflation. I admit the risk. But what reason is there for supposing that production would not be stimulated here as it was in the United States in the autumn of 1921 and at intervals since that time,

when exactly this policy was pursued? We make no such assumption when the increase in bank credit is due to certain purely fortuitous circumstances which have nothing to do with the requirements of British trade. For example, when the Bank of England buys more gold as a result of a decline in the Indian or German demand, the increase in bank cash, and consequently in the volume of credit, gives rise to no alarm. It is accepted as an axiom that an influx of gold into the Bank of England stimulates trade here. The stimulus, however, is not due to the Bank having more or less bullion buried in its vaults, but to the additional bank cash which the purchase of gold creates. The effect on the total of bank cash is precisely the same whether the Bank buys gold or bills or War Loan or bricks and mortar, whether it lends to the Government, the Bank of France or any other of its private customers. The Bank may buy from policy, with a steadfast eye on the needs of British trade, just as readily as it buys under compulsion when gold is tendered to it. But if gold does not flow in, and if without additional gold credit is not permitted to expand, full employment for our workpeople cannot be secured.

Let me call your attention once more to an illustration from the United States of the fact that credit may be expanded without being based upon any influx of gold and without resultant inflation. I have not the full figures for any later date than November 1926, but if we compare these with the corresponding figures for November 1924 we shall see that during the intervening period the monetary stock of gold in the United States has diminished, the deposits of reporting member banks have considerably increased, and prices have

fallen.* On old-fashioned theory this is a paradoxical situation, the simple explanation being that policy has prevailed over the movements of gold.

RIGIDITY OF BRITISH SYSTEM

To revert to the position in this country, I said just now that it makes no difference to the total of bank cash, which I repeat is the foundation of bank credit, whether the Bank of England buys gold or anything else. That is true; but it makes a great difference to the Bank of England reserve and to the ratio of reserve to liabilities. When the Bank buys gold its reserve is strengthened and the ratio improved; when it buys anything else the reserve remains unaffected and the ratio declines. It naturally follows that an increase of bank cash which arises from an influx of gold is regarded with equanimity and even satisfaction, while a proposal for an increase of bank cash specifically to meet trade needs would not be viewed with the same cordiality.

It is here that the rigidity of the Bank of England system comes into view. In the United States credit can be readily expanded to meet trade requirements more or less regardless of the movement of gold, while with us such movements are the guiding factor. The explanation of the difference is to be found in the far greater elasticity of

* The figures are as follows :—	End Nov.		Increase (+) or Decrease(—)
	1924	1926	
Monetary stock of gold, \$ millions ..	4,570	4,495	— 75
Deposits of reporting member banks, \$ millions	18,061	18,732	+ 671
Index number of wholesale prices, 1913 = 100	153	148	— 5

the Federal Reserve system as compared with our own central bank. The American system has been framed to suit modern conditions, and in fixing reserve requirements the development of deposit banking has been duly recognised. On the other hand, the Bank of England continues to operate under the Act of 1844, and as a consequence, although it holds a total of £151 millions of gold, its reserve against deposit liabilities is only £34 millions.* This reserve, susceptible as it is to a drain occasioned by foreign demands for gold, is insufficient to permit open market operations with a view to increasing the volume of credit on anything more than quite a small scale. Its diminutive size does not allow the same freedom of policy as that enjoyed by the Federal Reserve Banks. If our central bank were to be re-established on the same reserve basis as either the Federal Reserve Banks or the recently reconstructed Reichsbank, or indeed in accordance with any modern system, the Bank of England would have a reserve standing at a far higher figure than it does to-day and could work with much greater freedom of policy and with manifest advantages to our trade. The subject is too large to permit of my entering into detail on an occasion like this, but I am convinced that it merits the most disinterested and painstaking investigation. An exhaustive inquiry into the principles on which a central bank should be founded and should conduct its operations would be of immense service to the public. The present system may have suited conditions in 1844, when deposit banking was in its infancy. It might conceivably

* According to the return of Jan. 19, 1927, gold coin and bullion in the Issue Department amounted to £150,235,485; notes in the Banking Department amounted to £32,884,770 and gold and silver coin to £1,255,671.

suit conditions to-day, but if so only as the result of accident. It has survived for eighty years by virtue of its own suspension in times of crisis, the phenomenal supersession of the use of currency by that of cheques, and fortuitous discoveries of gold. The vital need for the future is to ensure that the maintenance of prosperity, with a growing population and ever-improving standard of living, both requiring an expansion in the volume of trade, shall not be hampered by false restrictions on the quantity of money. We need careful and expert consideration of the theoretical basis and practical technique of our credit and currency system, including the position of the Bank of England as the central institution and custodian of our monetary resources. No time is too early for this, but the present is peculiarly opportune by reason of the necessary revision of the Bank Charter involved in the projected amalgamation of the note issues.

THE DEVELOPMENT OF CENTRAL BANK POLICY

THE WORLD ON A DOLLAR STANDARD

January 24, 1928

A YEAR ago I ventured to suggest that there should be an inquiry into the working of our credit and currency system. The suggestion was not made in a critical or controversial spirit, but I thought it possible, as I still do, that an examination of the provisions of the Bank Act of 1844 would show that they are not well adapted to our actual requirements. It appears, however, that the Treasury see no sufficient reason for an inquiry, which they think might have unsettling effects in many directions. Although I cannot agree with this opinion I do not propose now to press the matter further. To-day I shall turn to another subject and ask you to consider the present position of gold as an international standard of value.

Nearly three years have elapsed since the pound sterling was re-established on the gold basis, and most of the important currencies are now stabilised in relation to gold. This general reversion to gold gives the appearance of a return to pre-war conditions in matters of credit and currency, but if we look further into the question we shall find that there has been a remarkable change. The development of central bank policy in the United States has shown that, while gold may be retained as a medium for making international payments, it can be deprived of its function as the ultimate standard of value. How this came about, the stages through

which American policy has passed, and the meaning of the conclusion deserve our close attention.

PRE-WAR CREDIT SYSTEM

Let me begin by reminding you of the conditions before the war. At that time the central banks adopted a purely passive attitude with regard to the control of credit, allowing the movement of gold into or out of a country to regulate the internal supply of money. If gold flowed in freely, credit and currency expanded; if more credit was created than was required to support the current growth of business, prices rose. If gold flowed out, credit and currency contracted; the growth of business was checked and prices showed a tendency to fall. It followed from this that the current course of world prices was determined by the supply of monetary gold. This does not mean that other causes, such as improved methods of production and communication, do not affect the price level, but these only come into play over more extended periods of time.

This passivity of the central banks probably arose from the peculiar structure of the British central banking system. London was then the unchallenged financial centre and free gold market of the world. In addition, Britain, as the world's principal creditor, was the main source of supply of new capital, and international trade was for the greater part financed by sterling bills. These various factors taken together constituted London the point through which a surplus or scarcity of gold made its influence felt, and the British price level was the medium through which gold operated on the price levels of all other countries. Under the

British central banking system only a small part of the country's total gold holding was available to meet a demand. So small indeed was the primary reserve in relation to the demands which might possibly be made upon it, that the principal aim of our central bank policy was to protect it from withdrawals of gold, even when these were really of quite moderate dimensions in relation to the total stock in the country. The movement of gold became a matter of the utmost importance, and the means of counteracting its influence on the supply of money and the course of prices hardly existed. In these circumstances there was little scope for the formulation or exercise of conscious policy, and the principles of central bank credit control remained undeveloped, if not unknown.

POST-WAR GOLD PROBLEMS

The first authoritative suggestion that gold movements need not have predominant importance in the control of credit and currency appeared in the recommendations of the international economic conference held at Genoa in 1922. The financial commission appointed at that conference, perhaps the most important of its kind that has been held, were deeply impressed by the danger of a gold shortage. As advised by most of the leading authorities, the commission took the view that a scarcity was to be looked for in the absence of any unforeseen developments in production. They were alarmed at the prospect of the supply of gold to the principal trading countries of the world becoming inadequate to provide for such an expansion of credit and currency as would be needed to meet the requirements of growing trade. Accordingly

the commission's recommendations were aimed at economising the use of gold, and one of their main suggestions was that instead of reverting to the pre-war system, under which each country held its own gold stock, gold exchange standards should be adopted by most countries, leaving only a few to hold the ultimate metallic reserves for the entire world.

The purpose of the conference in propounding measures to economise gold was undeniably sound, and it is a matter of regret that the suggestions for the adoption of gold exchange standards have been widely departed from. The proposal, it is true, was at first incorporated in a modified form in schemes of re-organisation in many parts of the world, particularly in central Europe and South America, but unfortunately the system has come to be regarded as merely a step on the road to a full gold standard. Already many countries actually on a gold exchange standard are unprofitably using their foreign assets in the purchase of gold reserves.

The eager desire to accumulate metallic reserves is no doubt prompted by the recollection of pre-war practice and ignores our more recent experience that, even in a gold standard country, gold need no longer be the controlling factor in the supply of money. This brings me to the example of the United States, and I shall endeavour to outline the stages along which that country has moved in its progress from pre-war to post-war conceptions of monetary policy. If, however, the successive proceedings of the American central reserve banks are to be fully understood, we must continually bear in mind a general proposition which lies at the root of monetary theory and to which I have referred on several previous occasions.

CENTRAL BANK CREDIT CONTROL

Stated in the briefest terms the proposition is that every central bank purchase and every loan by a central bank increases the cash resources of the other banks and provides the basis for an expansion in the volume of credit, or, in other words, of money; while every sale by a central bank or repayment of a central bank loan reduces bank cash and restricts the supply of money. This proposition holds true whatever the central bank may purchase or sell, whether it buys or disposes of gold, bills, securities or any other asset. From this it follows that central banks possess the power to regulate the supply of money irrespective of gold movements. According to their view of trade requirements they may, if they choose, wholly or partially offset a purchase of gold by a sale of other assets or a sale of gold by a purchase of assets. Obviously this power has always been inherent in a central bank system, and, apart from its ordinary day to day business, the Bank of England used from time to time in pre-war days to make purchases and sales of assets other than gold. But such transactions were only undertaken as an auxiliary to Bank Rate policy, which was itself determined by actual and potential movements of gold. Purchases and sales of gold were alone regarded as the effective control of the volume of bank cash and consequently of the supply of money.

AMERICAN EXPERIENCE

I come now to the story of the recent development of monetary policy in the United States. In consequence of the enormous accumulation of gold,

coupled with movements into and out of the country on a scale which, if left uncontrolled, would have proved disastrous to the stability of the American price level, the attention of the Reserve Banks was forcibly directed to their controlling powers. Beginning with only a partial use, in the course of time they have learnt to utilise these powers to the full. All the stages in the development of American practice can be seen in the thirteen years since 1914, which I divide into five periods. Each of these is marked by distinctive gold movements, and I propose to show how the resulting problems have been successively dealt with.

PERIODS OF INFLATION

The first period runs from the outbreak of the war to the middle of 1919, and covers the beginning of the great westward flow of gold to America. All the incoming gold, amounting on balance to over 1,000 million dollars, was purchased by the Federal Reserve Banks, and, following pre-war practice, was allowed to become the basis of additional credit. As if this were not enough, the central institutions created a further basis of credit by discounting bills for member banks for very large sums, and thus the ground was laid for the vast expansion of credit which actually occurred. The demands for credit on this inflationary basis were insatiable. No sufficient measures for counteracting the effect of the incoming gold had yet been adopted, and inflation ran a free course.

The second period runs from the middle of 1919, when the war-time embargo on gold export was removed, to the late summer of the following year. During this period dollar balances owned by South

American and Far Eastern countries were withdrawn in gold and America lost a net amount of nearly 400 million dollars. The export demand was met by the Reserve Banks, but it should be noted that the sale of this gold did not permanently deplete bank cash. Under the influence of the current inflation the Reserve Banks continued freely to discount bills and buy earning assets to such an extent that the supply of bank cash was considerably increased, and an enlarged basis was provided for further credit inflation.

SCIENTIFIC GOLD CONTROL

My third period covers more than four years and extends from the summer of 1920 to the last month of 1924. This period was marked by continuous imports of gold, and already in the early years we perceive a growing anxiety on the part of the central banking authorities with regard to the inflow. They realised that, if the gold were allowed to function to the fullest extent, it would lead to a further expansion of credit and a perpetuation of the evils of inflation. They determined therefore as far as possible to deprive the incoming gold of its credit creating capacity until the demands of trade should call for a larger credit basis.

The period I am now reviewing falls naturally into two parts; in the first the gold was neutralised, in the second it was allowed to form new bank cash. In the first two years, which covered the liquidation following the post-war boom, 1,000 million dollars of gold were imported and bought by the reserve banks. The immediate effect of the purchases was to increase bank cash, but the whole of this increase was used by the member banks to

pay off maturing bills held by the central banks, and on balance the volume of bank cash was unchanged. During this time policy was at work. The gold was absorbed by the Reserve Banks and held by them in place of discounted bills. This process of acquiring gold in lieu of interest-earning assets was expensive, and severely curtailed the income of the Reserve Banks. But their object had been achieved. The effect of the inflowing gold had been nullified in accordance with the dictates of policy, and pre-war practice was in process of abandonment as unsuitable to the novel conditions confronting the American authorities.

During the second half of the period the inflowing gold was treated in an entirely different manner. Industry was recovering from the slump, trade was in process of development and the banks were being called upon for larger supplies of money. The necessary credit expansion could only be effected upon a broadening basis of bank cash, and the incoming gold was utilised for this purpose. It was paid into the Reserve Banks and some of it was allowed to form a permanent addition to member banks' reserves. So insistent was the demand for money that bank cash was also provided by Reserve Bank purchases of securities and other earning assets, the result of the increase in bank cash being an expansion of nearly 8,000 million dollars in the deposits of all the banks in the country. Incidentally, it should be noted that the Reserve Banks did not themselves retain the incoming gold, but handed it over to the Treasury, receiving in exchange gold certificates which they put into circulation in place of federal reserve notes.

We now come to the fourth period, which, in contrast with that preceding it, was characterised

by an outflow of gold. Between December 1924 and the end of 1925, 150 million dollars of gold were exported from the United States. The whole of this amount was sold by the Reserve Banks, who did not, however, allow bank cash to contract. As gold was withdrawn the volume of bank cash was maintained by the acquisition of earning assets, so that, notwithstanding the outflow of gold, credit was actually increased in response to the needs of business. At the same time the position of the Reserve Banks was improved by the attainment of a higher proportion of earning assets.

My last period covers the twenty-two months to November 1927, during which gold again flowed into the United States, though the movement was of relatively small dimensions compared with previous years. The direction of the flow was by no means constant and was complicated in the later months by earmarkings and releases on foreign account, but whether the movement was temporarily inward or outward the Reserve Banks continued to ignore it in pursuing their credit policy.

SUMMARY OF AMERICAN EXPERIENCE

I will now summarise the developments in the years since 1920, the period during which the Reserve Bank credit policy has been most actively in operation. On balance 1,700 million dollars of gold have been imported into the United States. Over one-half of this amount has been absorbed into the Federal Reserve Banks, while the remainder has been taken by the Treasury as backing for gold certificates which have gone into circulation in the place of Federal Reserve notes. Of the total import only one-third on balance has been allowed to form

new bank cash. Throughout the entire period, whether gold was flowing in or out, the central banks have been careful as far as possible to regulate the supply of bank cash in accordance with the needs of business. Trade has expanded rapidly and has been accompanied by a growth in bank deposits, amounting in the aggregate to 15,000 million dollars, an increase of 40 per cent. Meanwhile the almost uninterrupted prosperity enjoyed by America has been attended by a large measure of stability in the price level.

Here we find ourselves face to face with a definite test of success or failure in monetary policy. Temporary booms can always be obtained by inflationary methods, but it is certain that prosperity on a sound and lasting basis cannot be secured except on a fairly steady price level. It must be remembered that, whether we are on a gold or any other standard, the direction in which the price level moves is immediately determined by the volume of money, as modified by its rate of turnover, in relation to the volume of business. If the supplies of money increase beyond the requirements of business, prices tend to rise; if, on the other hand, the supplies of money are inadequate, prices fall. The relation between money supplies and business requirements, viewed in its effect upon the price level, should then be the first care of the central banking authority, and we find on an examination of American statistics for recent years that movements in the price level upwards or downwards have never been allowed to proceed far. We must therefore conclude that the monetary authorities have met with a high degree of success in the formulation and execution of their policy. This they have done under conditions of great diffi-

culty, brought about by gold movements of unprecedented magnitude.

THE DOLLAR STANDARD

It is necessary now to observe the bearing of American monetary policy on the operation of the gold standard. To-day, as before the war, the price of gold in America is fixed, and we are apt to assume that the value of gold continues to govern the value of the dollar. But such an assumption is no longer correct. While an ounce of gold can always be exchanged for a definite number of dollars, the value of the ounce will depend upon what these dollars will buy, and this in turn will obviously depend upon the American price level. If the price level in America fluctuated according to the movements of gold, the purchasing power or value of the dollar would still depend, as it did formerly, upon the value of gold. But we know that this is not so. As I have just shown, the American price level is not affected by gold movements, but is controlled* by the policy of the Reserve Banks in expanding or contracting credit. It follows, therefore, that it is not the value of gold in America which determines the value of the dollar, but the value of the dollar which determines the value of gold.

The mechanism by which the dollar governs the external value of gold is obvious. If the price level outside America should rise in consequence of an increase in the supply of gold, America would absorb the surplus gold; if, on the other hand, the

*The use of the word "controlled" must be understood in relation to what has gone before. On page 138 it was observed that the supply of monetary gold was only one of the causes affecting the price level, and the statement now made is that, so far as gold movements formerly controlled the price level, policy has now taken their place.—R. McK.

external price level should fall in consequence of a shortage of gold, America would supply the deficiency. The movement of gold would continue until the price levels inside and outside America were brought once more into equilibrium. Although gold is still the nominal basis of most currencies, the real determinant of movements in the general world level of prices is thus the purchasing power of the dollar. The conclusion therefore is forced upon us that in a very real sense the world is on a dollar standard.

THE OUTLOOK

Such is the position as I see it to-day, and I am naturally led to ask how long it is likely to continue. America is able to control the world price level because of two conditions. In the first place, her gold stocks are so great that she can afford to lose large quantities without running any risk of the gold reserve falling below the legal minimum; in the second place, her central banking system is so constituted that, given her great wealth, she can absorb large quantities of gold and at the same time deprive it of its credit creating powers. In a word, America is rich enough either to lose gold or to gain it. She holds now one-half the total monetary gold of the world. Moreover, her creditor position constitutes a permanent magnet for gold. Her debtors must pay, and, if they can find no other way, they must pay in gold. The only condition, as far as I can judge, under which America might be drained of her gold surplus is that she should continuously make foreign loans beyond her true capacity to lend. That she will lend excessively at times is quite probable--there are indications indeed that she has done so re-

cently; it is by no means an uncommon practice with ourselves—but that she should overlend so heavily as to make a serious inroad into her surplus gold seems to me very unlikely. I conclude that, as long as conditions remain at all similar to those we know to-day, America will be able to pursue her credit policy without regard to gold movements and to maintain control over the world level of prices.

Let me repeat that I speak of conditions as I see them to-day. Taking a view of the world as a whole it is evident that a great advance has been made since the time when gold was the main determinant of the direction of the price level. But we have still some way to go before we attain full understanding of the principles upon which the volume of credit should be regulated in relation to business demands. We know that the proper control of credit by the central bank in any country is a very important factor in trade prosperity and that a guiding principle in the exercise of this control should be the maintenance of a stable level of prices. But this is not all; there is still a wide field for inquiry on both the practical and theoretical sides. Unfortunately, however, the dearth of statistical information is a grave difficulty in the way of investigation. Individual banks cannot do much; it is useless for them to publish more than the customary details at present disclosed in their periodic statements, since no sound generalisation can be deduced from banking figures unless they relate to the banks as a whole. Co-operation between all the banks, including the central bank, in publishing the statistics required by scientific students would help us materially in the solution of some of the problems of credit control.